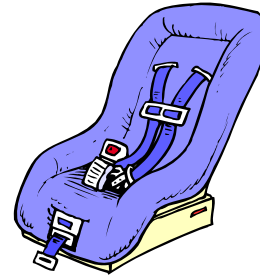


Occupant Protection



Section 2: Occupant Protection

2

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Children and Restraint Use

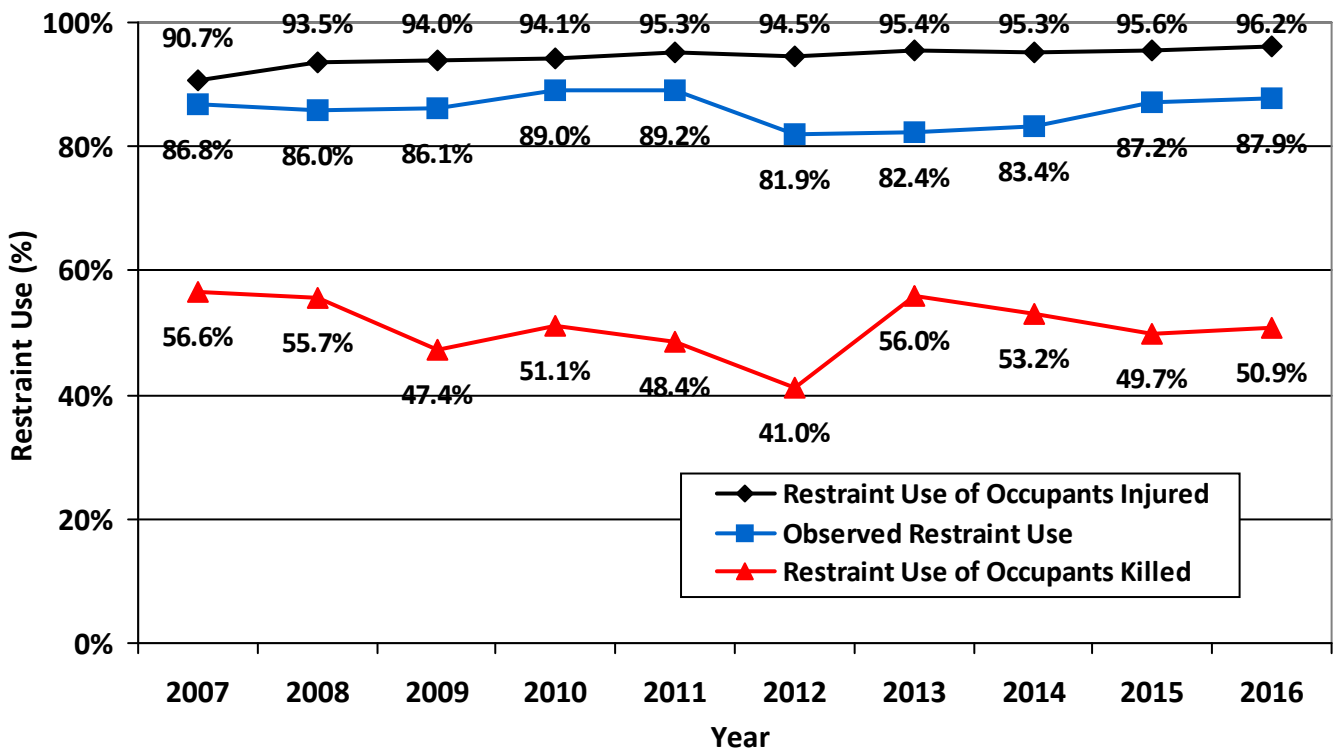
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Trends

Restraint Use of Occupants In Crashes (Utah 2007-2016)

Persons												
Year	Non-Injured			Injured			Killed			Total		
	Unres #	Restrained #	%	Unres #	Restrained #	%	Unres #	Restrained #	%	Unrestrained #	Restrained #	%
2007	3,529	109,245	96.9%	2,116	20,541	90.7%	82	107	56.6%	5,727	129,893	95.8%
2008	1,369	97,907	98.6%	1,273	18,400	93.5%	78	98	55.7%	2,720	116,405	97.7%
2009	2,273	91,303	97.6%	1,120	17,627	94.0%	91	82	47.4%	3,484	109,012	96.9%
2010	1,896	89,245	97.9%	1,048	16,599	94.1%	86	90	51.1%	3,030	105,934	97.2%
2011	1,801	91,793	98.1%	845	17,249	95.3%	82	77	48.4%	2,728	109,119	97.6%
2012	2,115	89,699	97.7%	990	16,996	94.5%	79	55	41.0%	3,184	106,750	97.1%
2013	1,579	93,675	98.3%	827	17,290	95.4%	59	75	56.0%	2,465	111,040	97.8%
2014	1,806	95,482	98.1%	894	18,261	95.3%	72	82	53.2%	2,772	113,825	97.6%
2015	1,705	109,360	98.5%	936	20,113	95.6%	87	86	49.7%	2,728	129,559	97.9%
2016	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%
Total	19,603	984,235	98.0%	10,895	184,584	94.4%	796	835	51.2%	31,294	1,169,654	97.4%



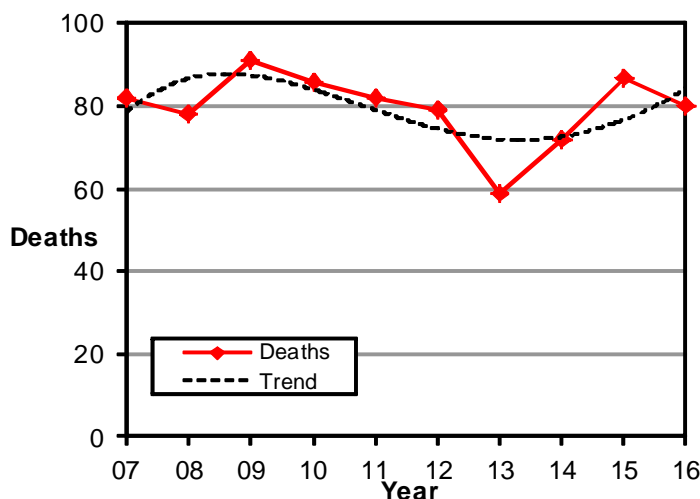
- The 2016 restraint use of people in crashes increased to 98.3% from 95.8% in 2007.
- Restraint use among occupants injured increased from 90.7% in 2007 to 96.2% in 2016.
- Restraint use among occupants killed decreased from 56.6% in 2007 to 50.9% in 2016.

Note: Restraint use is reported for occupants in a passenger car, light truck, van, SUV, or heavy truck. Occupants are considered "Restrained" if they were reported as using a shoulder/lap belt, lap belt, shoulder belt, or a child safety seat at the scene of the crash. It is estimated that seat belts can reduce the risk of death and serious injury by about 50%.

Trends

Unrestrained Occupant Deaths (Utah 2007-2016)

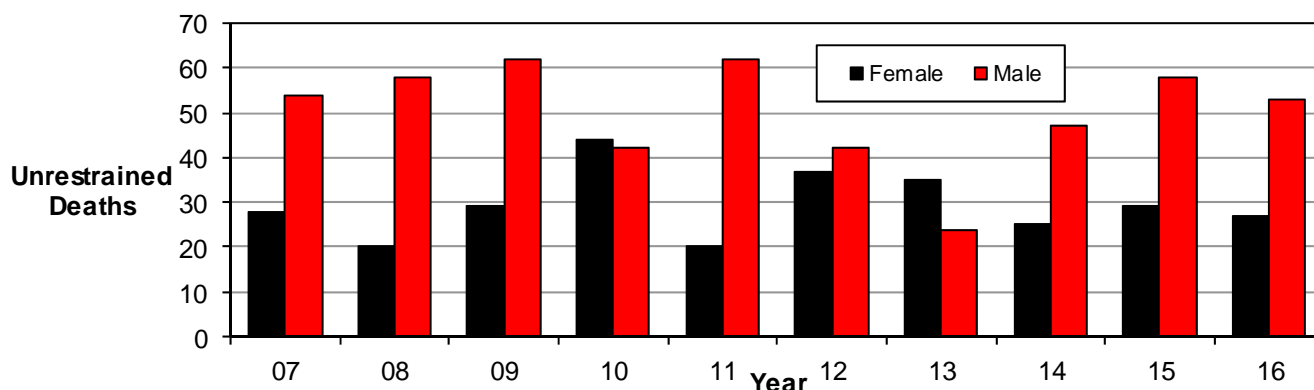
Year	Deaths		
	All #	Unrestrained Occupants #	%
	2007	299	82
2008	276	78	28.3%
2009	244	91	37.3%
2010	253	86	34.0%
2011	243	82	33.7%
2012	217	79	36.4%
2013	220	59	26.8%
2014	256	72	28.1%
2015	278	87	31.3%
2016	281	80	28.5%
Total	2,567	796	31.0%



- Over the past 10 years, 31.0% of deaths have been to unrestrained occupants.
- On average, 80 people die a year in Utah who are unrestrained.
- The percentage of deaths to unrestrained occupants had a high of 37.3% in 2009 and a low of 26.8% in 2013.

Restraint Use by Gender of Crash Occupant Deaths (Utah 2007-2016)

Gender	Occupants Killed																Total #	Total %						
	Unrestrained										Restrained													
	07	08	09	10	11	12	13	14	15	16	07	08	09	10	11	12			13	14	15	16		
Female	28	20	29	44	20	37	35	25	29	27	294	45.5%	42	42	35	40	32	26	29	37	30	39	352	54.5%
Male	54	58	62	42	62	42	24	47	58	53	502	51.0%	65	56	47	50	45	29	46	45	56	44	483	49.0%
Total	82	78	91	86	82	79	59	72	87	80	796	48.8%	107	98	82	90	77	55	75	82	86	83	835	51.2%

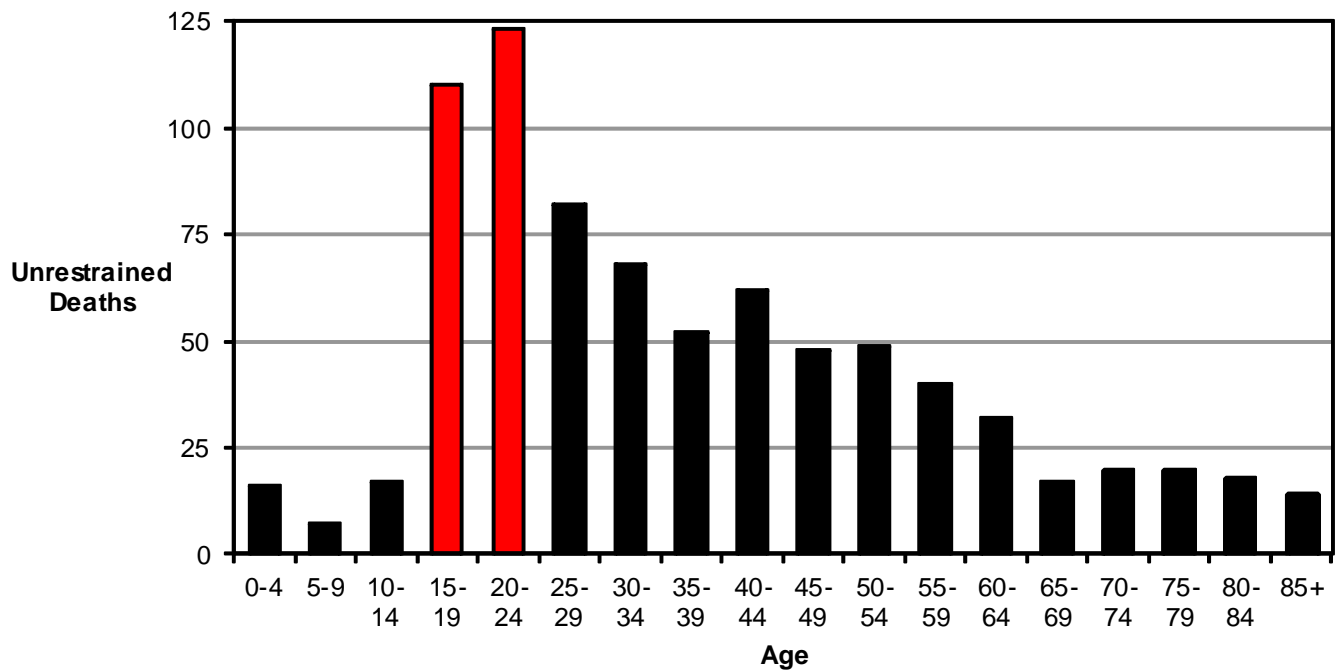


- Over the last 10 years, restraint use of female (54.5%) occupants killed was higher than males (49.0%).
- The number of female occupants killed who were unrestrained averages 29 deaths a year over the last 10 years with a high of 44 in 2010 and a low of 20 in 2008 and 2011.
- The number of male occupants killed who were unrestrained averages 50 deaths a year over the last 10 years with a high of 62 in 2009 and 2011 and a low of 24 in 2013.

Trends

Fatal Restraint Use by Age (Utah 2007-2016)

Age	Unrestrained												Total #		Total %		Restrained												Total #		Total %	
	07	08	09	10	11	12	13	14	15	16	Total #	Total %	07	08	09	10	11	12	13	14	15	16	Total #	Total %								
	07	08	09	10	11	12	13	14	15	16			07	08	09	10	11	12	13	14	15	16										
0-4	1	2	2	1	4	0	1	1	2	2	16	37.2%	5	1	2	4	7	3	2	2	0	1	27	62.8%								
5-9	2	1	2	0	0	0	0	0	1	1	7	29.2%	4	4	2	2	0	2	0	1	2	0	17	70.8%								
10-14	1	4	5	1	1	1	1	0	1	2	17	56.7%	3	1	2	3	0	0	0	3	1	0	13	43.3%								
15-19	17	8	14	13	11	7	8	11	10	11	110	54.7%	14	13	12	6	4	7	3	12	6	14	91	45.3%								
20-24	18	13	15	10	11	10	12	9	14	11	123	60.3%	10	10	12	9	6	6	4	7	9	8	81	39.7%								
25-29	6	7	4	12	12	13	4	5	12	7	82	56.9%	9	11	3	5	6	4	4	4	6	10	62	43.1%								
30-34	5	11	8	7	8	7	3	7	6	6	68	50.7%	10	7	5	4	7	4	7	9	7	6	66	49.3%								
35-39	4	4	3	11	6	7	2	5	5	5	52	51.5%	7	8	4	4	3	1	5	5	7	5	49	48.5%								
40-44	7	8	9	4	5	9	5	4	6	5	62	60.2%	5	3	6	4	4	4	5	5	3	2	41	39.8%								
45-49	4	4	8	4	5	4	2	4	8	5	48	54.5%	4	8	5	4	2	4	2	3	5	3	40	45.5%								
50-54	4	6	5	4	1	8	5	9	4	3	49	45.0%	8	8	5	8	6	3	6	4	7	5	60	55.0%								
55-59	4	3	4	4	4	3	4	6	3	5	40	43.0%	5	4	5	5	4	1	9	6	6	8	53	57.0%								
60-64	2	1	3	2	6	3	4	4	2	5	32	40.0%	7	3	5	3	7	8	4	4	4	3	48	60.0%								
65-69	1	2	3	5	3	0	0	0	3	0	17	28.8%	3	5	3	5	7	1	6	4	5	3	42	71.2%								
70-74	0	1	1	1	2	2	3	2	3	5	20	36.4%	3	4	1	7	3	1	7	1	7	1	35	63.6%								
75-79	1	1	2	4	1	2	1	2	1	5	20	36.4%	1	2	4	9	2	3	1	5	4	4	35	63.6%								
80-84	1	1	2	1	1	1	3	3	4	1	18	33.3%	4	5	5	3	2	1	6	3	3	4	36	66.7%								
85+	3	1	1	2	1	2	1	0	2	1	14	26.4%	5	1	1	5	7	2	4	4	4	6	39	73.6%								
Unknown	1	0	0	0	0	0	0	0	0	0	1	100.0%	0	0	0	0	0	0	0	0	0	0	0	0.0%								
Total	82	78	91	86	82	79	59	72	87	80	796	48.8%	107	98	82	90	77	55	75	82	86	83	835	51.2%								

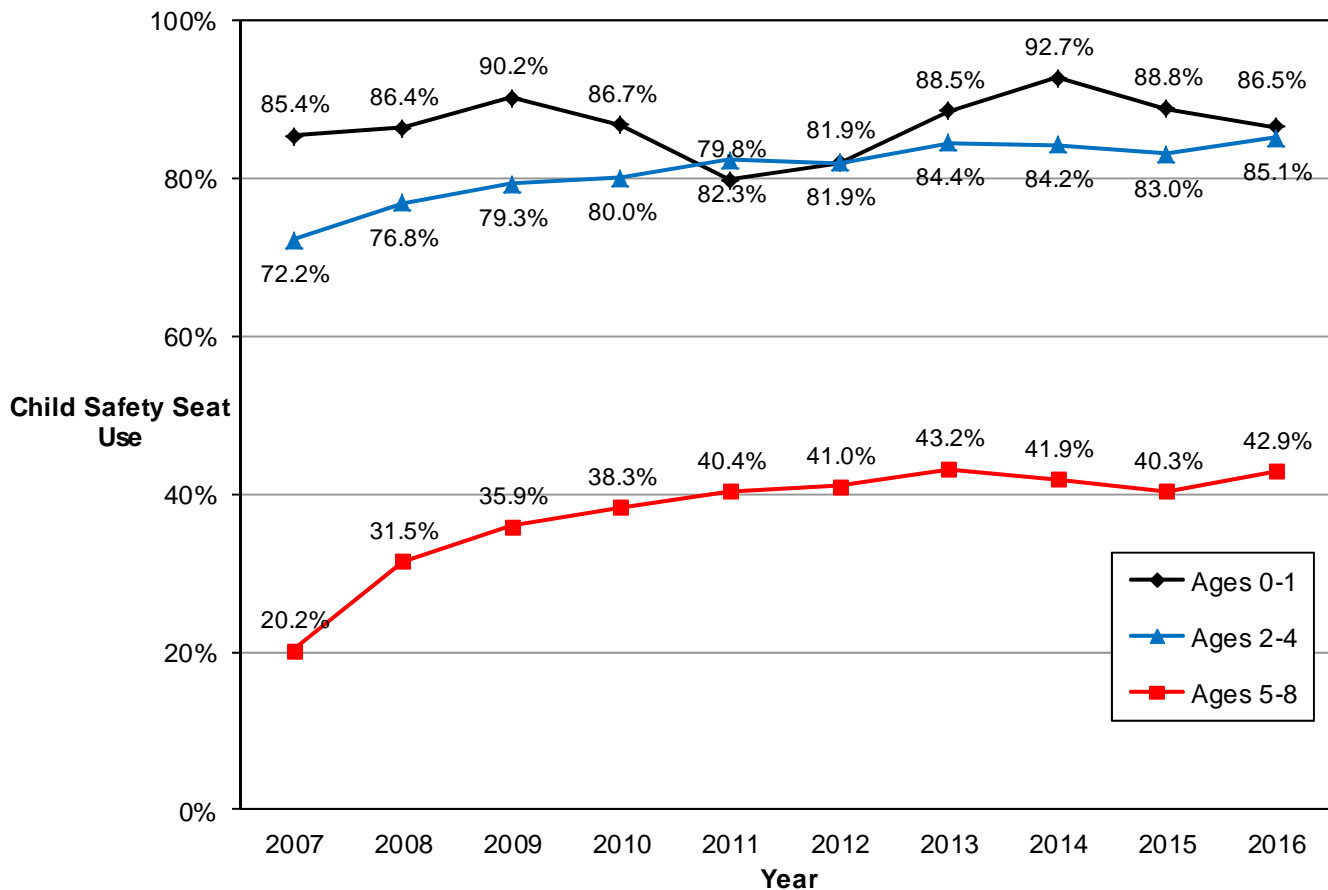


- Over the last 10 years, the highest number of unrestrained deaths occurred to the 20-24, 15-19, and 25-29 year age groups.
- The highest percent of restraint use among occupants killed occurred among the ages of 65+ and 0-9 years.
- The lowest percent of restraint use among occupants killed occurred among the ages of 10-49 years.

Trends

Child Safety Seat Use by Children Age 0 to 8 Years (Utah 2007-2016)

Child Occupants												
Year	Ages 0-1			Ages 2-4			Ages 5-8			Total		
	No CSS	Child Safety Seat	%	No CSS	Child Safety Seat	%	No CSS	Child Safety Seat	%	No CSS	Child Safety Seat	%
	#	#	%	#	#	%	#	#	%	#	#	%
2007	367	2,151	85.4%	961	2,495	72.2%	2,864	727	20.2%	4,192	5,373	56.2%
2008	286	1,822	86.4%	694	2,301	76.8%	2,125	978	31.5%	3,105	5,101	62.2%
2009	194	1,791	90.2%	606	2,326	79.3%	2,006	1,122	35.9%	2,806	5,239	65.1%
2010	261	1,703	86.7%	598	2,389	80.0%	1,833	1,139	38.3%	2,692	5,231	66.0%
2011	425	1,682	79.8%	520	2,414	82.3%	1,753	1,188	40.4%	2,698	5,284	66.2%
2012	363	1,644	81.9%	486	2,206	81.9%	1,824	1,265	41.0%	2,673	5,115	65.7%
2013	218	1,679	88.5%	412	2,229	84.4%	1,750	1,332	43.2%	2,380	5,240	68.8%
2014	149	1,885	92.7%	434	2,313	84.2%	1,917	1,384	41.9%	2,500	5,582	69.1%
2015	250	1,984	88.8%	524	2,565	83.0%	2,244	1,517	40.3%	3,018	6,066	66.8%
2016	330	2,107	86.5%	482	2,751	85.1%	2,183	1,637	42.9%	2,995	6,495	68.4%
Total	2,843	18,448	86.6%	5,717	23,989	80.8%	20,499	12,289	37.5%	29,059	54,726	65.3%

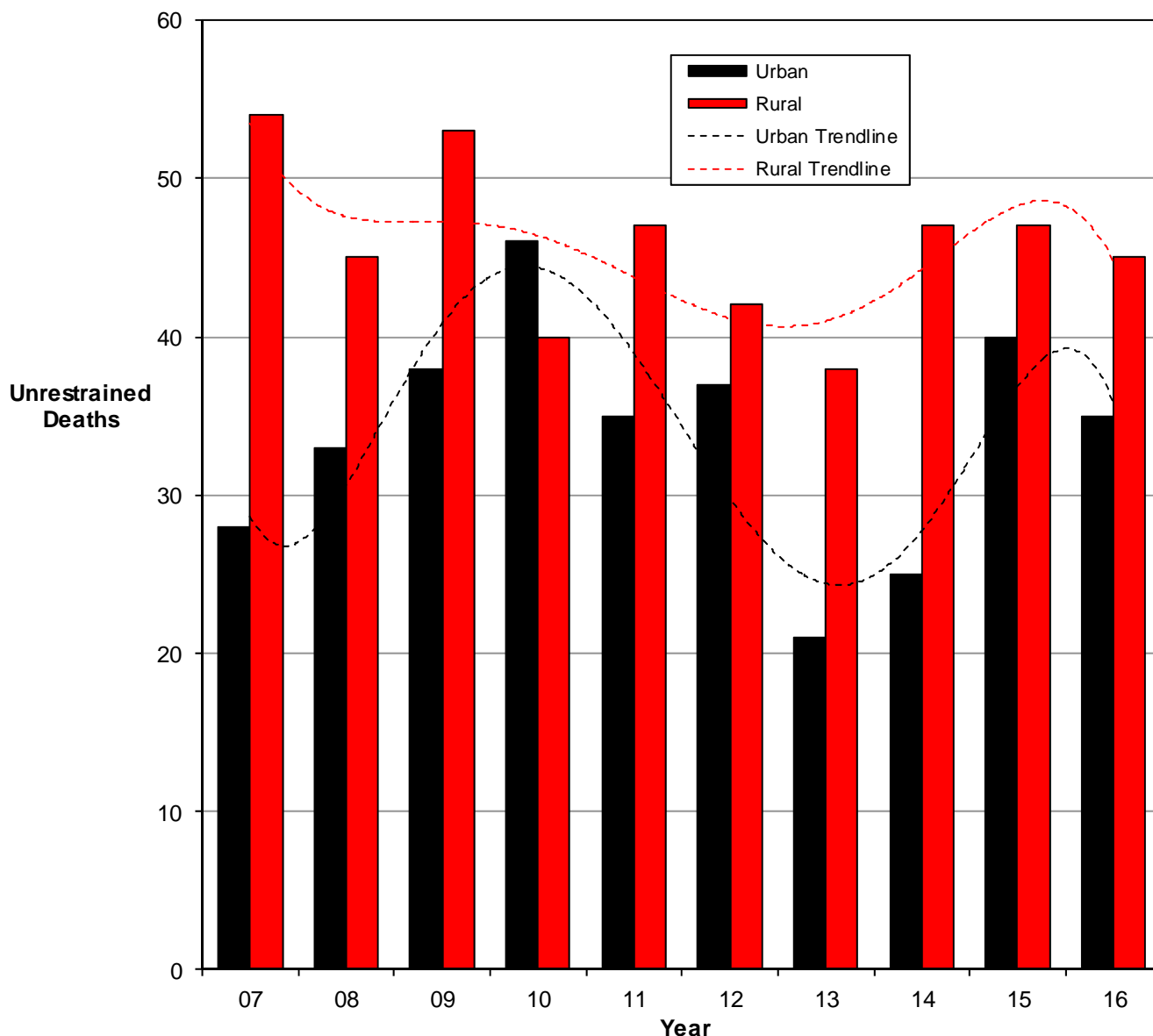


- The ten year trend shows an increase of child safety seat (CSS) use in crashes for ages 0-8 years.
- Ages 5-8 years showed the biggest gain in CSS use, increasing from 20.2% in 2007 to 42.9% in 2016.

Trends

Fatal Restraint Use by Rural/Urban Location (Utah 2007-2016)

Occupants Killed																								
Location	Unrestrained											Restrained												
	07	08	09	10	11	12	13	14	15	16	Total #	Total %	07	08	09	10	11	12	13	14	15	16	Total #	Total %
Rural	54	45	53	40	47	42	38	47	46	45	457	57.3%	52	48	46	39	40	21	31	28	36	341	42.7%	
Urban	28	33	38	46	35	37	21	25	41	35	339	45.2%	55	50	36	51	37	34	44	54	50	411	54.8%	
Total	82	78	91	86	82	79	59	72	87	80	796	51.4%	107	98	82	90	77	55	75	82	86	0	752	48.6%

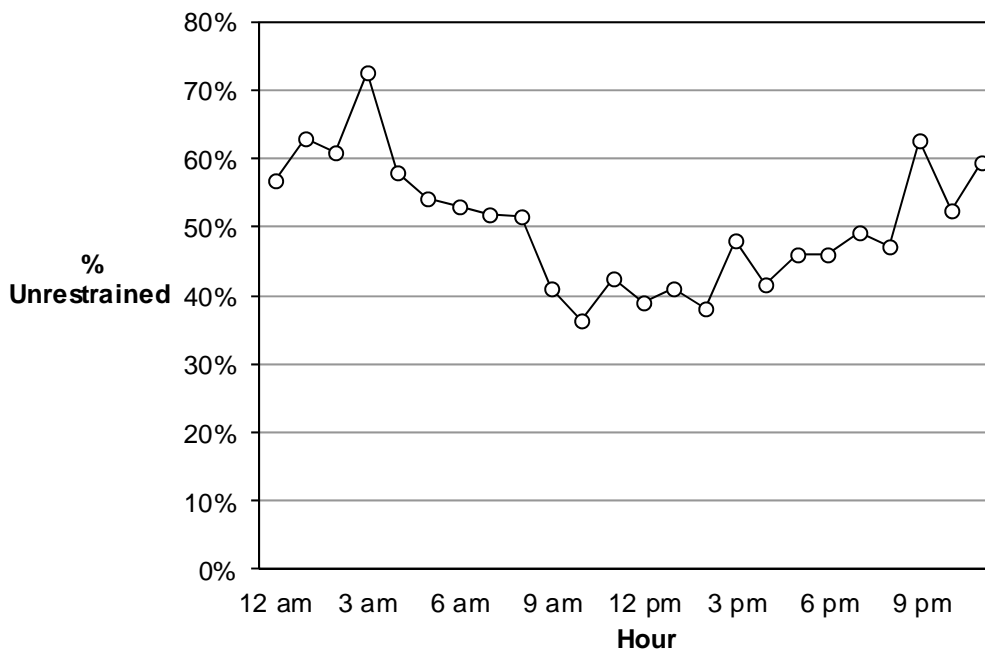


- Over the last 10 years, restraint use of urban (54.8%) occupants killed was higher than rural (42.7%).
- The number of rural occupants killed who were unrestrained averages 46 deaths a year over the last 10 years with a high of 54 in 2007 and a low of 38 in 2013.
- The number of urban occupants killed who were unrestrained averages 34 deaths a year over the last 10 years with a high of 46 in 2010 and a low of 21 in 2013.

Trends

Fatal Restraint Use by Hour (Utah 2007-2016)

Hour	Unrestrained											Total #		Total %		Restrained											Total #		Total %	
	07	08	09	10	11	12	13	14	15	16			07	08	09	10	11	12	13	14	15	16								
Midnight	3	2	10	2	4	2	2	2	1	1	29	56.9%	3	3	6	1	0	0	2	1	3	3	22	43.1%						
1 a.m.	3	4	5	1	3	3	2	4	3	1	29	63.0%	4	5	0	1	0	0	0	1	2	4	17	37.0%						
2 a.m.	4	6	3	2	2	4	0	2	3	2	28	60.9%	4	1	1	5	1	0	3	0	1	2	18	39.1%						
3 a.m.	5	1	3	4	5	2	0	2	4	6	32	72.7%	4	0	0	0	2	1	0	1	1	3	12	27.3%						
4 a.m.	1	1	8	2	1	1	4	5	0	2	25	58.1%	2	2	3	1	2	0	0	4	4	0	18	41.9%						
5 a.m.	4	4	1	3	2	4	4	1	5	5	33	54.1%	2	2	3	2	5	1	3	2	5	3	28	45.9%						
6 a.m.	2	6	2	2	2	3	3	2	4	1	27	52.9%	3	3	2	4	2	3	1	5	1	0	24	47.1%						
7 a.m.	3	7	3	8	3	3	3	0	5	4	39	52.0%	6	7	7	4	2	0	0	3	5	2	36	48.0%						
8 a.m.	4	1	4	4	3	3	2	5	2	6	34	51.5%	7	1	2	5	1	1	4	8	2	1	32	48.5%						
9 a.m.	1	3	0	2	6	1	2	1	4	3	23	41.1%	6	7	4	7	1	2	3	3	0	0	33	58.9%						
10 a.m.	2	0	4	2	5	3	5	2	1	1	25	36.2%	2	6	8	4	7	3	3	3	6	2	44	63.8%						
11 a.m.	2	4	3	6	1	2	2	2	3	3	28	42.4%	3	9	5	2	3	2	3	4	3	4	38	57.6%						
Noon	2	5	1	3	3	4	3	3	1	2	27	39.1%	6	4	3	7	4	3	2	3	3	7	42	60.9%						
1 p.m.	7	2	4	9	7	1	2	1	2	8	43	41.0%	6	4	4	4	8	4	11	9	1	11	62	59.0%						
2 p.m.	4	2	1	5	4	1	2	4	7	4	34	38.2%	3	4	3	5	7	10	5	5	9	4	55	61.8%						
3 p.m.	1	3	9	6	3	7	6	2	6	5	48	48.0%	11	5	8	5	3	2	6	7	4	1	52	52.0%						
4 p.m.	2	6	4	6	3	4	2	5	5	5	42	41.6%	7	5	4	5	8	7	7	5	7	4	59	58.4%						
5 p.m.	6	4	7	1	4	11	4	2	5	6	50	45.9%	11	4	7	8	3	3	6	4	8	5	59	54.1%						
6 p.m.	4	1	2	6	5	4	2	8	9	1	42	46.2%	3	8	3	6	7	2	3	3	8	6	49	53.8%						
7 p.m.	7	2	3	4	3	3	1	2	2	7	34	49.3%	3	4	3	3	2	1	5	3	2	9	35	50.7%						
8 p.m.	3	6	6	1	4	3	2	4	2	2	33	47.1%	4	4	1	5	4	5	4	1	5	4	37	52.9%						
9 p.m.	4	6	6	3	5	1	1	2	3	1	32	62.7%	1	4	2	1	2	1	2	4	1	1	19	37.3%						
10 p.m.	1	0	1	3	2	4	1	4	4	1	21	52.5%	4	2	3	0	1	3	1	2	1	2	19	47.5%						
11 p.m.	6	1	1	1	2	5	4	6	6	3	35	59.3%	2	4	0	4	2	1	1	1	4	5	24	40.7%						
Total	81	77	91	86	82	79	59	71	87	80	793	48.7%	107	98	82	89	77	55	75	82	86	83	834	51.3%						

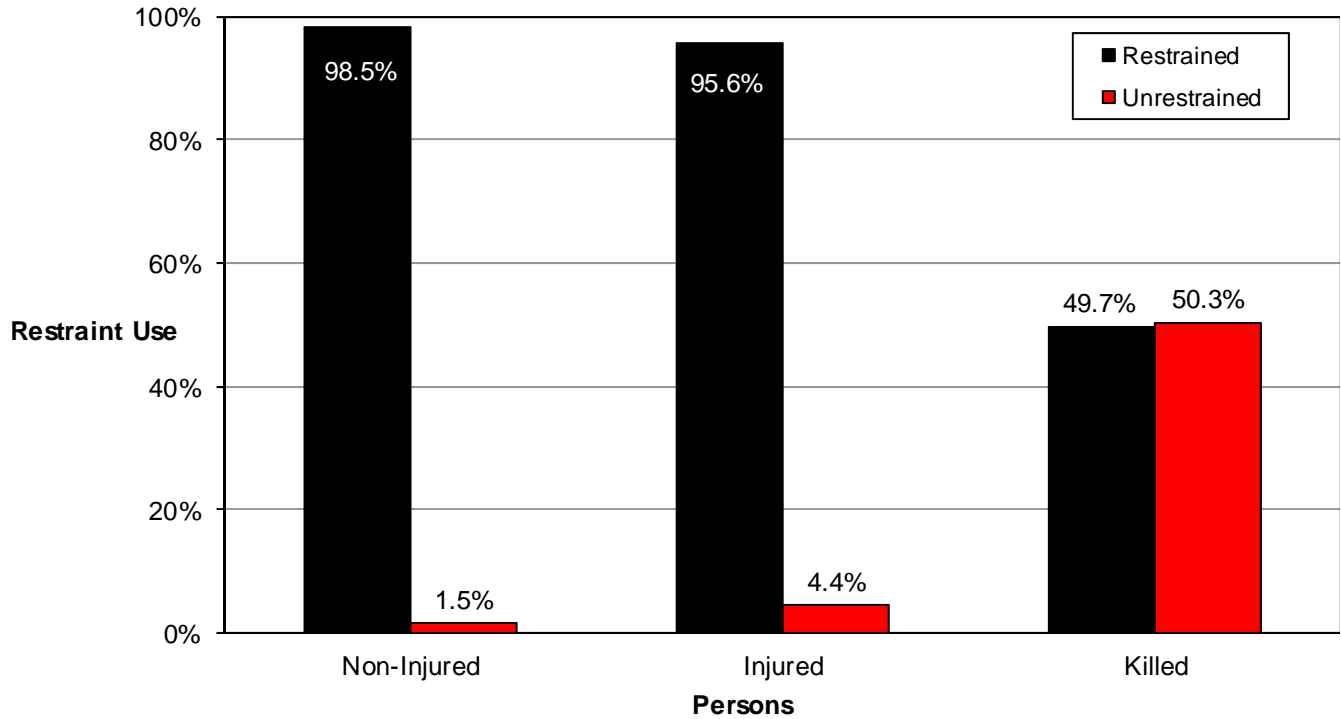


- Over the last 10 years, the highest number of unrestrained deaths occurred during the 3:00-6:59 p.m. hours.
- The highest percent of restraint use among occupants killed occurred during the 9 a.m. to 2:59 p.m. hours.
- The lowest percent of restraint use among occupants killed occurred during the 1:00-3:59 a.m. and 9 p.m. hours.

Vehicle Occupants

Restraint Use by Injury Severity (Utah 2016)

Persons								
Restraint Use	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Restrained	116,526	98.7%	21,508	96.2%	83	50.9%	138,117	98.3%
Unrestrained	1,530	1.3%	846	3.8%	80	49.1%	2,456	1.7%
Total	118,056	100.0%	22,354	100.0%	163	100.0%	140,573	100.0%



- 98% of persons who survived a crash reported being restrained compared to half of the persons killed.
- Unrestrained injured crash occupants were 24 times more likely to be killed than restrained injured crash occupants.

Restraint Use by Gender of Crash Occupants (Utah 2016)

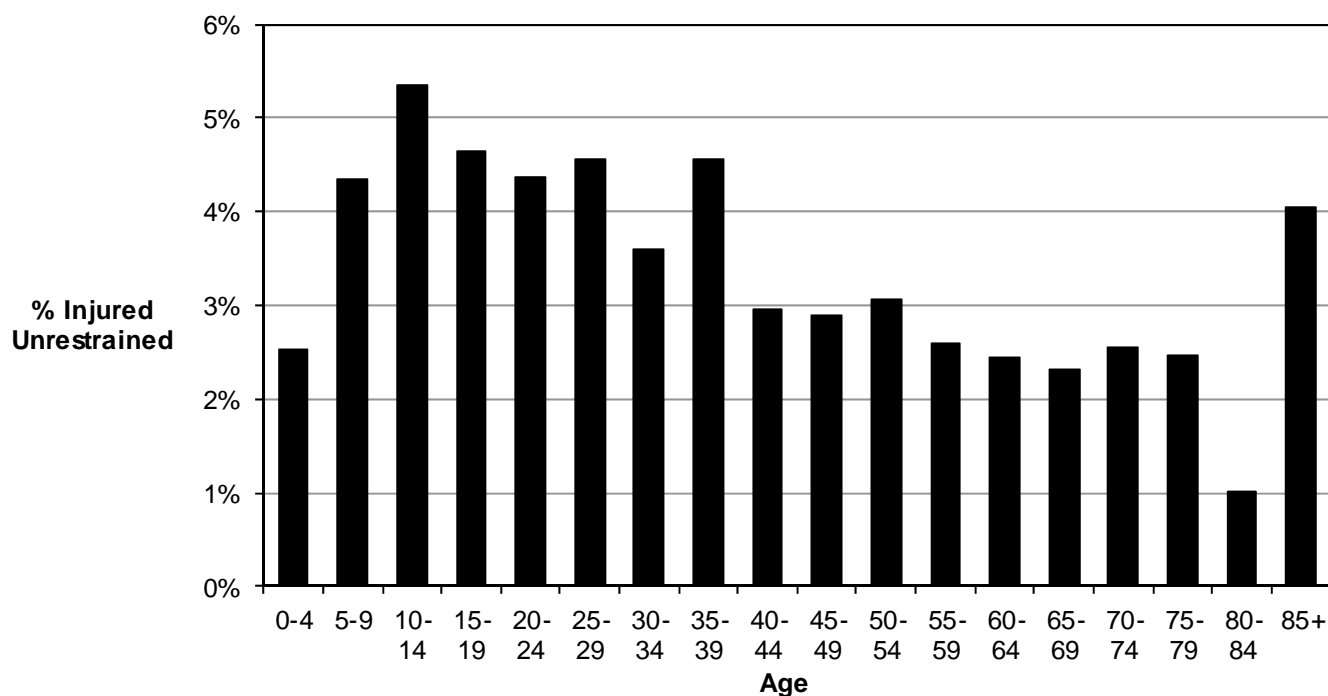
Persons												
Gender	Non-Injured			Injured			Killed			Total		
	Unres	Restrained	%	Unres	Restrained	%	Unres	Restrained	%	Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Female	496	51,679	99.0%	363	12,410	97.2%	27	39	59.1%	886	64,128	98.6%
Male	919	64,432	98.6%	478	9,065	95.0%	53	44	45.4%	1,450	73,541	98.1%
Unknown	115	415	78.3%	5	33	86.8%	0	0	n/a	120	448	78.9%
Total	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%

- Overall, restraint use of female (98.6%) crash occupants was slightly higher than males (98.1%).
- For persons killed, female crash occupants had higher restraint use (59%) than males (45%).

Vehicle Occupants

Restraint Use by Age of Crash Occupants (Utah 2016)

Persons												
Age	Non-Injured			Injured			Killed			Total		
	Unres	Restrained	%	Unres	Restrained	%	Unres	Restrained	%	Unrestrained	Restrained	%
	#	#	%	#	#	%	#	#	%	#	#	%
0-4	25	5,216	99.5%	11	425	97.5%	2	1	33.3%	38	5,642	99.3%
5-9	26	4,122	99.4%	25	551	95.7%	1	0	0.0%	52	4,673	98.9%
10-14	29	3,891	99.3%	40	709	94.7%	2	0	0.0%	71	4,600	98.5%
15-19	185	17,335	98.9%	139	2,849	95.3%	11	14	56.0%	335	20,198	98.4%
20-24	178	16,334	98.9%	129	2,824	95.6%	11	8	42.1%	318	19,166	98.4%
25-29	138	12,017	98.9%	109	2,283	95.4%	7	10	58.8%	254	14,310	98.3%
30-34	142	10,240	98.6%	76	2,039	96.4%	6	6	50.0%	224	12,285	98.2%
35-39	137	9,337	98.6%	87	1,822	95.4%	5	5	50.0%	229	11,164	98.0%
40-44	96	7,507	98.7%	46	1,507	97.0%	5	2	28.6%	147	9,016	98.4%
45-49	111	6,169	98.2%	38	1,275	97.1%	5	3	37.5%	154	7,447	98.0%
50-54	95	5,385	98.3%	37	1,167	96.9%	3	5	62.5%	135	6,557	98.0%
55-59	84	4,899	98.3%	30	1,125	97.4%	5	8	61.5%	119	6,032	98.1%
60-64	60	4,217	98.6%	23	918	97.6%	5	3	37.5%	88	5,138	98.3%
65-69	34	3,105	98.9%	16	677	97.7%	0	3	100.0%	50	3,785	98.7%
70-74	22	2,085	99.0%	12	458	97.4%	5	1	16.7%	39	2,544	98.5%
75-79	8	1,353	99.4%	8	318	97.5%	5	4	44.4%	21	1,675	98.8%
80-84	8	829	99.0%	2	196	99.0%	1	4	80.0%	11	1,029	98.9%
85+	4	605	99.3%	6	142	95.9%	1	6	85.7%	11	753	98.6%
Unknown	148	1,880	92.7%	12	223	94.9%	0	0	n/a	160	2,103	92.9%
Total	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%



- Overall, injured crash occupants aged 10-14 years had the highest percentage of being unrestrained.
- Crash occupants aged 15-24 years had the highest amount of unrestrained occupant deaths.

Vehicle Occupants

Restraint Use by County (Utah 2016)

Persons												
County	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Daggett	0	23	100.0%	0	0	n/a	0	0	n/a	0	23	100.0%
Davis	126	11,382	98.9%	62	2,065	97.1%	3	12	80.0%	191	13,459	98.6%
Utah	202	17,558	98.9%	101	3,430	97.1%	12	10	45.5%	315	20,998	98.5%
Cache	37	3,706	99.0%	24	540	95.7%	3	4	57.1%	64	4,250	98.5%
Salt Lake	664	53,877	98.8%	286	9,857	97.2%	11	14	56.0%	961	63,748	98.5%
Weber	91	8,716	99.0%	71	1,829	96.3%	4	7	63.6%	166	10,552	98.5%
Washington	59	5,669	99.0%	46	954	95.4%	2	4	66.7%	107	6,627	98.4%
Kane	0	248	100.0%	4	50	92.6%	1	1	50.0%	5	299	98.4%
Morgan	4	205	98.1%	0	30	100.0%	0	0	n/a	4	235	98.3%
Wasatch	18	1,190	98.5%	8	162	95.3%	1	4	80.0%	27	1,356	98.0%
Summit	35	1,879	98.2%	19	309	94.2%	1	3	75.0%	55	2,191	97.6%
Iron	30	1,660	98.2%	23	275	92.3%	2	0	0.0%	55	1,935	97.2%
Box Elder	54	2,600	98.0%	28	464	94.3%	6	1	14.3%	88	3,065	97.2%
San Juan	7	345	98.0%	3	36	92.3%	1	1	50.0%	11	382	97.2%
Carbon	14	617	97.8%	8	94	92.2%	2	0	0.0%	24	711	96.7%
Garfield	4	296	98.7%	4	53	93.0%	4	0	0.0%	12	349	96.7%
Uintah	22	785	97.3%	9	102	91.9%	0	1	100.0%	31	888	96.6%
Juab	17	584	97.2%	7	133	95.0%	2	3	60.0%	26	720	96.5%
Grand	8	300	97.4%	5	57	91.9%	1	2	66.7%	14	359	96.2%
Millard	11	707	98.5%	22	152	87.4%	2	3	60.0%	35	862	96.1%
Tooele	47	1,755	97.4%	31	377	92.4%	9	8	47.1%	87	2,140	96.1%
Wayne	4	60	93.8%	0	20	100.0%	0	0	n/a	4	80	95.2%
Emery	15	346	95.8%	5	88	94.6%	3	3	50.0%	23	437	95.0%
Rich	1	79	98.8%	4	10	71.4%	0	0	n/a	5	89	94.7%
Sevier	13	536	97.6%	18	139	88.5%	7	0	0.0%	38	675	94.7%
Duchesne	13	467	97.3%	19	68	78.2%	0	0	n/a	32	535	94.4%
Beaver	18	455	96.2%	16	101	86.3%	0	0	n/a	34	556	94.2%
Sanpete	15	436	96.7%	20	105	84.0%	2	2	50.0%	37	543	93.6%
Piute	1	45	97.8%	3	8	72.7%	1	0	0.0%	5	53	91.4%
Statewide	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%

- Daggett, Davis, Utah, and Cache counties had the highest percentage of occupants that were restrained. Piute, Sanpete, Beaver, and Duchesne counties had the lowest percentage.

Restraint Use by Urban/Rural Location (Utah 2016)

Persons												
Location	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Urban	1,179	100,908	98.8%	590	18,675	96.9%	35	51	59.3%	1,804	119,634	98.5%
Rural	351	15,618	97.8%	256	2,833	91.7%	45	32	41.6%	652	18,483	96.6%
Statewide	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%

- Urban areas had a higher percentage of occupants that were restrained for all injury severity levels.
- Occupants in rural crashes were 2.3 times more likely to be unrestrained than occupants in urban crashes.

Vehicle Occupants

Restraint Use by Ejection (Utah 2016)

Persons												
Ejection Status	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Not Ejected	1,479	116,182	98.7%	716	21,403	96.8%	33	75	69.4%	2,228	137,660	98.4%
Partially Ejected	1	0	0.0%	19	8	29.6%	8	4	33.3%	28	12	30.0%
Fully Ejected	2	1	33.3%	88	23	20.7%	38	4	9.5%	128	28	17.9%
Total	1,482	116,183	98.7%	823	21,434	96.3%	79	83	51.2%	2,384	137,700	98.3%

- There is an inverse relationship between ejection from a motor vehicle and restraint use.
- The majority (98.4%) of crash occupants not ejected from a motor vehicle were restrained compared to only 17.9% of crash occupants fully ejected from a motor vehicle.
- Unrestrained occupants were 240 times more likely to be ejected from a motor vehicle compared to restrained occupants.
- Ejection from the vehicle is one of the most harmful events that can happen to a person in a crash. Seat belts are effective in preventing total ejections.

Restraint Use by Occupant Placement (Utah 2016)

Persons												
Occupant Placement	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Driver	1,157	83,606	98.6%	516	15,326	96.7%	49	57	53.8%	1,722	98,989	98.3%
Front Seat	124	16,440	99.3%	151	3,948	96.3%	6	18	75.0%	281	20,406	98.6%
Back Seat(s)	140	15,951	99.1%	134	2,168	94.2%	17	7	29.2%	291	18,126	98.4%
Other/Unknown	109	529	82.9%	45	66	59.5%	8	1	11.1%	162	596	78.6%
Total	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%

- Among all occupants injured, drivers had the highest restraint use (96.7%).
- Among all occupants killed, front seat passengers had the highest restraint use (75.0%)

Restraint Use by Vehicle Type (Utah 2016)

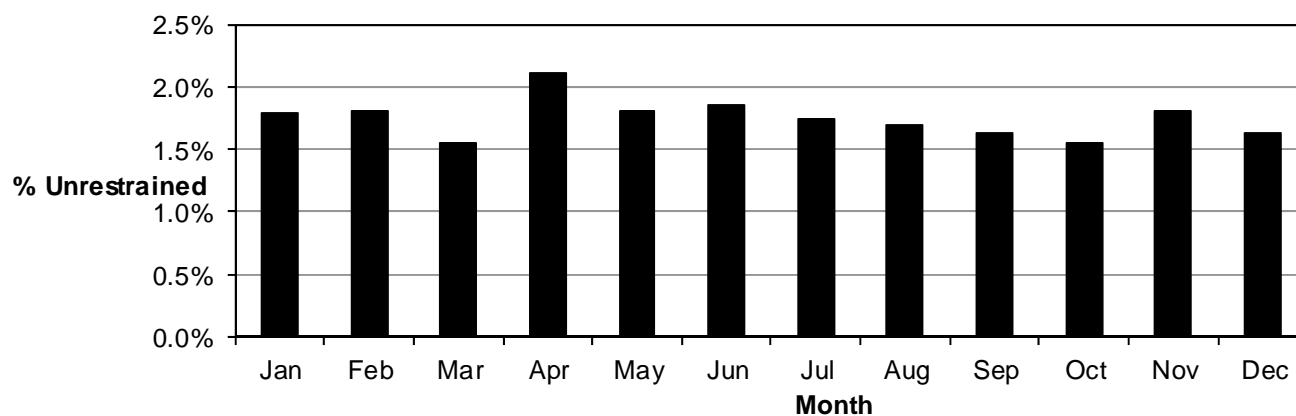
Persons												
Vehicle Type	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Van	109	8,718	98.8%	34	1,457	97.7%	5	3	37.5%	148	10,178	98.6%
SUV	291	28,650	99.0%	208	4,992	96.0%	21	18	46.2%	520	33,660	98.5%
Passenger Car	663	57,794	98.9%	407	12,549	96.9%	25	54	68.4%	1,095	70,397	98.5%
Pickup Truck	305	17,970	98.3%	166	2,289	93.2%	26	8	23.5%	497	20,267	97.6%
Heavy Truck	145	3,277	95.8%	30	210	87.5%	3	0	0.0%	178	3,487	95.1%
RV/Motorhome	17	117	87.3%	1	11	91.7%	0	0	n/a	18	128	87.7%
Total	1,530	116,526	98.7%	846	21,508	96.2%	80	83	50.9%	2,456	138,117	98.3%

- Occupants in RV/motorhome, heavy truck, and pickup truck were the least likely to be restrained.

Vehicle Occupants

Restraint Use by Month (Utah 2016)

Persons										
Month	Unrestrained					Restrained				
	Not Injured	Injured	Killed	Total	%	Not Injured	Injured	Killed	Total	%
January	146	66	5	217	1.8%	10,123	1,808	2	11,933	98.2%
February	106	76	2	184	1.8%	8,444	1,501	12	9,957	98.2%
March	113	48	2	163	1.6%	8,678	1,610	4	10,292	98.4%
April	144	74	7	225	2.1%	8,721	1,652	4	10,377	97.9%
May	121	67	15	203	1.8%	9,271	1,740	8	11,019	98.2%
June	126	76	13	215	1.9%	9,527	1,826	11	11,364	98.1%
July	114	74	7	195	1.7%	9,228	1,777	10	11,015	98.3%
August	117	81	3	201	1.7%	9,753	1,835	6	11,594	98.3%
September	127	71	6	204	1.6%	10,345	1,967	8	12,320	98.4%
October	102	74	8	184	1.6%	9,785	1,882	9	11,676	98.4%
November	166	65	10	241	1.8%	11,096	1,956	5	13,057	98.2%
December	148	74	2	224	1.6%	11,555	1,954	4	13,513	98.4%
Total	1,530	846	80	2,456	1.7%	116,526	21,508	83	138,117	98.3%



- April had the lowest overall restraint use. May had the highest amount of unrestrained deaths. August had the highest number of unrestrained injuries.

Restraint Use by Day of Week (Utah 2016)

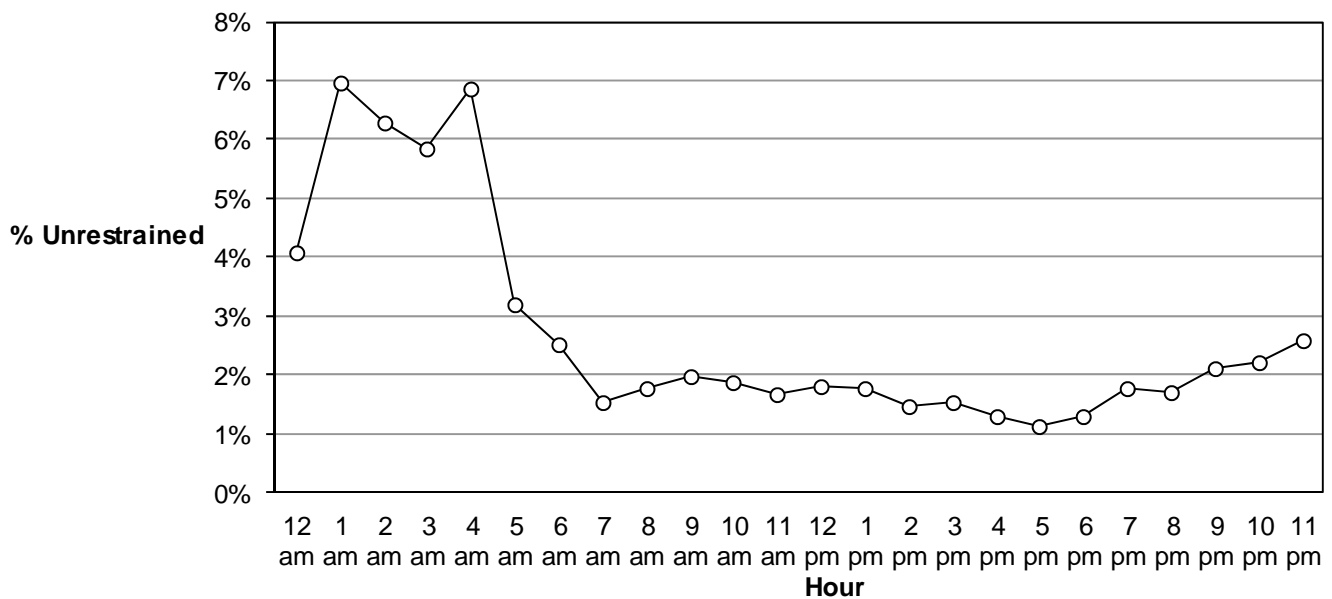
Persons										
Day of Week	Unrestrained					Restrained				
	Not Injured	Injured	Killed	Total	%	Not Injured	Injured	Killed	Total	%
Sunday	194	99	8	301	2.8%	8,690	1,738	11	10,439	97.2%
Monday	215	129	9	353	1.6%	17,989	3,330	12	21,331	98.4%
Tuesday	199	96	9	304	1.4%	17,622	3,159	7	20,788	98.6%
Wednesday	211	121	13	345	1.6%	17,461	3,231	14	20,706	98.4%
Thursday	213	120	16	349	1.6%	18,041	3,320	11	21,372	98.4%
Friday	265	145	7	417	1.7%	20,742	3,731	15	24,488	98.3%
Saturday	233	136	18	387	2.0%	15,981	2,999	13	18,993	98.0%
Total	1,530	846	80	2,456	1.7%	116,526	21,508	83	138,117	98.3%

- Weekends had the lowest restraint use.

Vehicle Occupants

Restraint Use by Hour (Utah 2016)

Hour	Persons									
	Unrestrained					Restrained				
	Not Injured	Injured	Killed	Total	%	Not Injured	Injured	Killed	Total	%
Midnight	34	32	1	67	4.1%	1,246	326	3	1,575	95.9%
1 a.m.	36	28	1	65	7.0%	657	206	4	867	93.0%
2 a.m.	30	12	2	44	6.3%	511	141	2	654	93.7%
3 a.m.	17	9	6	32	5.8%	383	130	3	516	94.2%
4 a.m.	29	13	2	44	6.9%	460	138	0	598	93.1%
5 a.m.	19	15	5	39	3.2%	939	238	3	1,180	96.8%
6 a.m.	42	27	1	70	2.5%	2,268	435	0	2,703	97.5%
7 a.m.	58	38	4	100	1.5%	5,510	971	2	6,483	98.5%
8 a.m.	86	43	6	135	1.8%	6,341	1,146	1	7,488	98.2%
9 a.m.	73	36	3	112	2.0%	4,711	865	0	5,576	98.0%
10 a.m.	62	31	1	94	1.9%	4,145	779	2	4,926	98.1%
11 a.m.	67	36	3	106	1.7%	5,297	956	4	6,257	98.3%
Noon	99	43	2	144	1.8%	6,657	1,261	7	7,925	98.2%
1 p.m.	103	40	8	151	1.8%	7,074	1,272	11	8,357	98.2%
2 p.m.	94	42	4	140	1.5%	8,022	1,459	4	9,485	98.5%
3 p.m.	116	62	5	183	1.5%	10,077	1,724	1	11,802	98.5%
4 p.m.	105	58	5	168	1.3%	10,983	1,854	4	12,841	98.7%
5 p.m.	110	64	6	180	1.1%	13,598	2,412	5	16,015	98.9%
6 p.m.	93	57	1	151	1.3%	9,631	1,834	6	11,471	98.7%
7 p.m.	69	48	7	124	1.8%	5,808	1,041	9	6,858	98.2%
8 p.m.	51	28	2	81	1.7%	3,924	738	4	4,666	98.3%
9 p.m.	56	39	1	96	2.1%	3,793	666	1	4,460	97.9%
10 p.m.	48	26	1	75	2.2%	2,803	536	2	3,341	97.8%
11 p.m.	33	19	3	55	2.6%	1,688	380	5	2,073	97.4%
Total	1,530	846	80	2,456	1.7%	116,526	21,508	83	138,117	98.3%



- Vehicle occupants were least likely to be restrained at night (midnight to 4:59 a.m.).

Children and Restraint Use

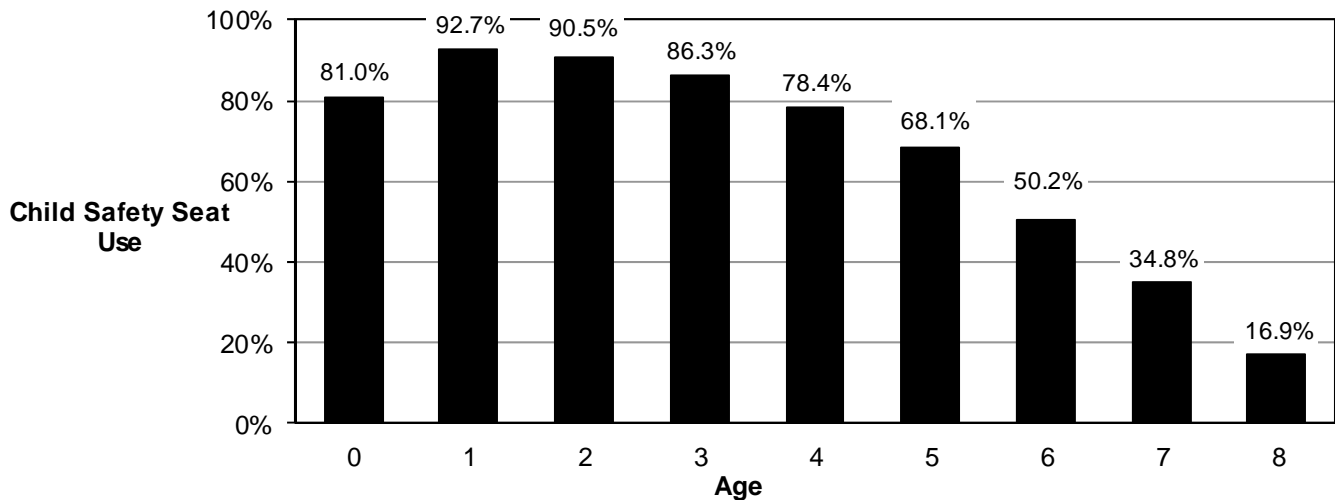
Restraint Use for Children Age 0 to 8 Years (Utah 2016)

Child Occupants								
Restraint Use	Ages 0-1		Ages 2-4		Ages 5-8		Total	
	#	%	#	%	#	%	#	%
Child Safety Seat	2,107	86.5%	2,751	85.1%	1,637	42.9%	6,495	68.4%
Seat Belt Only	311	12.8%	463	14.3%	2,141	56.0%	2,915	30.7%
Unrestrained	19	0.8%	19	0.6%	42	1.1%	80	0.8%
Total	2,437	100.0%	3,233	100.0%	3,820	100.0%	9,490	100.0%

- The older the child the less likely they were using a child safety seat.
- The drastic decrease in child safety seat use for children aged 5-8 years is concerning. This indicates that children are moving to adult-sized seat belts too early.

Child Safety Seat Use of Children (0 to 8 Years) by Age (Utah 2016)

Persons						
Age	Child Safety Seat Used		Child Safety Seat Not Used		Total	
	#	%	#	%	#	%
0	1,042	81.0%	245	19.0%	1,287	100.0%
1	1,075	92.7%	85	7.3%	1,160	100.0%
2	995	90.5%	104	9.5%	1,099	100.0%
3	908	86.3%	144	13.7%	1,052	100.0%
4	848	78.4%	234	21.6%	1,082	100.0%
5	667	68.1%	312	31.9%	979	100.0%
6	482	50.2%	479	49.8%	961	100.0%
7	330	34.8%	617	65.2%	947	100.0%
8	158	16.9%	775	83.1%	933	100.0%
Total	6,505	68.5%	2,995	31.5%	9,500	100.0%



- While over 86% of children ages 0 and 1 years were in a child safety seat, only 78% of 4-year-olds, 50% of 6-year-olds, and 17% of 8-year-olds were in a child safety seat.