



Texas Preventable Disease

NEWS

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NON-CIRCULATING
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OCCUPANT RESTRAINT USAGE IN FATAL CRASHES -- FATAL ACCIDENT REPORTING SYSTEM, 1975-1986*

Motor vehicle crashes account for almost one third of the deaths due to injuries and half of the deaths due to unintentional injuries in the United States. The economic cost of motor vehicle crashes is conservatively estimated at \$57 billion per year.

Since 1975, the National Highway Traffic Safety Administration (NHTSA) has used the Fatal Accident Reporting System (FARS) to maintain information on all crashes involving at least one fatality. FARS contains data on all persons (decedents and survivors) involved in fatal crashes, on all vehicles involved (regardless of whether an occupant died), on the circumstances of the crash (weather, road type and condition, time of day, etc.), on whether occupants were wearing seat belts, and on the severity of injuries suffered by each person. This report presents data on passenger restraint use among occupants of automobiles involved in fatal crashes for the period 1975 to 1986.

Based on several methods of measurement, overall motor vehicle-related fatality rates increased during the period 1960 to 1985. Deaths measured by miles traveled increased during the early 1960s, decreased from the mid-1960s until the mid-1970s, and decreased again in the early 1980s (Figure 1). The population death rate (unadjusted for age) rose through most of the 1960s, fell sharply in the early 1970s, rose again in the late 1970s, and fell again in the 1980s (Figure 2).

The proportion of individuals wearing seat belts in fatal crashes decreased from 1975 to 1980 and then increased after 1980, with the largest increases occurring in 1985 and 1986 (Figure 3). Within each year, the proportion of seat-belt use was inversely related to the severity of injury, with uninjured persons having the highest proportion of seat-belt use and those who died having the lowest (Figure 4).

MMWR Editorial Note: The effectiveness of seat belts in reducing mortality has been shown in numerous studies. Although the size of the effect has varied considerably across studies, NHTSA has derived a consensus estimate of about a 40% to 50% reduction in mortality.

The FARS data at both the aggregate and the individual levels suggest that increases in the use of occupant restraints are associated with decreases in motor vehicle-related fatality rates. However, these data cannot conclusively demonstrate such a relationship. For example, the motor vehicle-related fatality rate in any particular year depends upon factors such as the number and severity of crashes that occur, the crash-worthiness of the automobiles involved, and the ability of occupants to survive crashes. Thus, other factors besides increased restraint usage might be responsible for observed decreases in the motor vehicle-related fatality rate. Additionally, since the survivors in FARS are not a random sample of all occupants involved in motor vehicle crashes, a direct comparison of the proportion of survivors who had worn seat belts to the proportion of decedents who had worn seat belts may be misleading.

Currently, a total of 28 states have mandatory seat-belt laws in effect. The first mandatory seat-belt law became effective in New York in early 1985. Additional seat-belt laws also became effective that year in New Jersey, Illinois, Michigan, Texas, Nebraska, Missouri, North Carolina, the District of Columbia, and Hawaii. Eight more seat-belt laws that were passed in 1985 took effect in 1986 and 1987. In early 1985, 15% of occupants nationwide wore seat belts; by the end of that year, the proportion had increased to 23%. NHTSA estimates that 263 lives were saved during 1985 because of the seat-belt laws in the first eight states.

*Reprinted from: CDC. MMWR 1987;36(38);636,641-3.

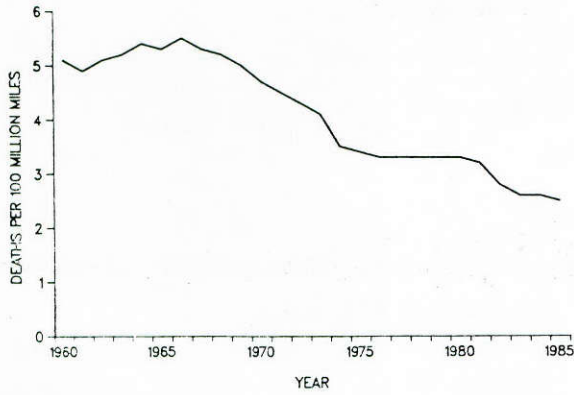


Figure 1.
Deaths per 100 million miles traveled --
United States, 1960-1985

Figure 2.
Motor vehicle-related deaths
per 100,000 residents --
United States, 1960-1985

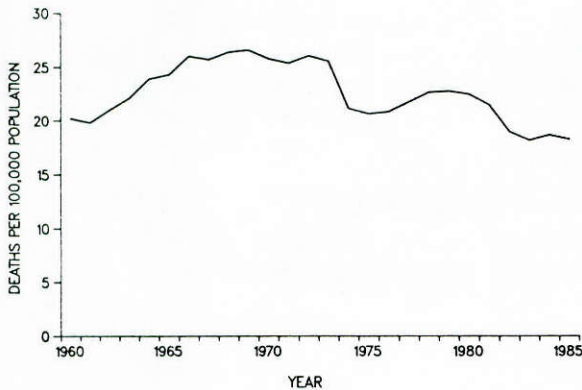
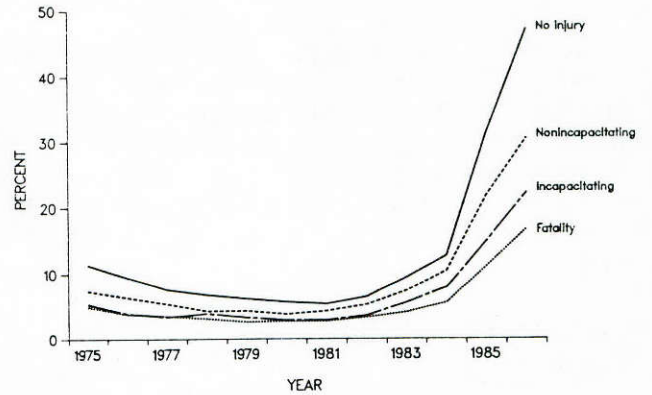
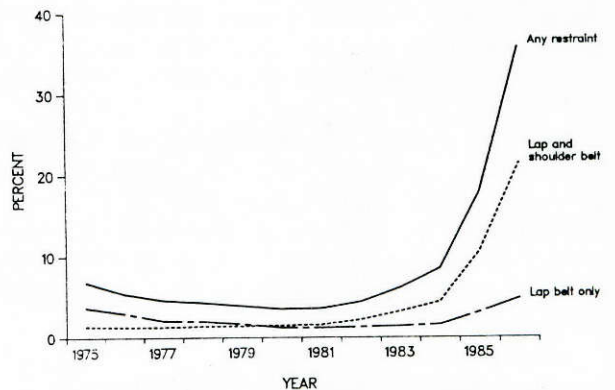


Figure 3.
Percentage of seat-belt users among
occupants of automobiles involved in
fatal crashes -- United States, 1975-1986

Figure 4.
Percentage of seat-belt users among
occupants of automobiles involved in fatal
crashes, by severity of injury --
United States, 1975-1986



MONTHLY SUMMARY OF REPORTABLE DISEASES IN TEXAS

(Counties listed below reflect only those with populations of 100,000 or more, based on 1986 population estimates.)

County	Cumulative through: DECEMBER 1987																
	Rubella	Campylobacteriosis	Chickenpox	Encephalitis	Influenza Infections	Hepatitis A	Hepatitis B	Hepatitis NB-NB	Influenza	Measles	Meningococcal Infections	Septic Meningitis	Mumps	Pertussis	Rubella	Salmonella	Shigella
BEXAR	8	45	1156	10	34	107	59	5	3845	2	3	46	0	15	1	113	177
BRAZORIA	25	6	16	0	7	2	6	0	0	0	0	0	0	0	0	18	13
COMERON	56	0	473	1	1	34	8	0	3945	32	0	1	16	1	0	36	61
COLLIN	0	3	214	4	2	7	4	3	1150	2	0	9	9	0	0	9	6
DALLAS	47	64	5869	6	105	294	237	20	8059	133	13	135	53	2	0	357	274
DENTON	0	13	135	2	2	6	11	0	1148	0	3	5	3	1	0	21	7
EL PASO	9	68	1206	2	32	205	96	4	62	1	7	2	13	0	0	121	124
FORT BEND	1	16	383	4	13	3	9	3	611	0	0	13	1	0	0	38	31
GALVESTON	2	5	475	1	9	4	20	2	76	0	2	23	7	0	0	48	40
HARRIS	14	167	6858	23	182	175	147	29	7373	3	12	226	83	10	0	587	273
HIDALGO	3	0	47	0	1	10	3	0	0	0	1	2	0	1	0	27	48
JEFFERSON	0	0	157	3	4	10	27	1	1997	1	2	8	5	1	0	39	3
LUBBOCK	2	14	61	7	15	39	18	2	140	1	2	27	9	1	2	46	51
MCKENNA	0	0	161	1	6	11	7	1	104	0	1	0	6	3	0	15	3
MONTGOMERY	1	9	100	2	9	5	24	3	17	0	2	4	5	2	0	18	9
MUSKIEG	0	19	1109	0	8	19	45	1	5161	0	3	6	5	0	0	0	32
TARRANT	4	46	48	4	51	201	215	13	77	122	13	53	25	3	0	119	205
TRAVIS	37	97	594	5	60	52	49	11	441	1	7	30	5	2	0	133	106
All Other Counties	53	159	6492	31	190	490	406	96	26321	136	45	125	76	36	1	725	474
Cumulative TX 1987	272	747	24674	107	701	1782	1391	154	59737	442	118	723	329	70	4	2484	1907
Cumulative TX 1986	394	583	23228	191	647	2137	1900	205	83224	398	138	1383	239	112	78	2445	2454

1987 CUMULATIVE TOTALS FOR OTHER REPORTABLE DISEASES:

Acute Dec. Pesticide Poisoning	11	Coccidioidomycosis	43	Histoplasmosis	76	Psittacosis	1	Toxic Shock Syndrome	20
Anthrax	0	Dengue	0	Legionellosis	37	Q Fever	1	Trichinosis	0
Babesiosis *	0	Diphtheria	0	Leptospirosis	1	Rabies	0	Tuberculosis	1709
Bordetella	4	Elevated Blood Lead Levels	1223	Listeria Infections	38	Reye Syndrome	9	Tularemia	3
Brucellosis	41	Bornholm	41021	Lyme Disease	27	Rocky Mt Spotted Fever	20	Typhoid	28
Chlamydia trachomatis	1639	Hansen's Disease	27	Malaria	49	Silicosis *	0	Typhus, Murine	23
Cholera	0	Hepatitis D (Delta Agent)	1	Plague	0	Syphilis (P18)	2282	Vibrio Infection	19
		Hepatitis type unspecified	546	Poliovirus	0	Tetanus	4	Yellow Fever	0

* Blood lead level 140ug/dl in persons 15 years of age or older; summarized by date of blood lead test.
 * Regular summaries of these reportable occupational diseases will be included as reporting procedures are better established.

* * *

VIRAL ISOLATES FOR DECEMBER 1987

<u>Virus</u>	<u>County of Residence of Patient(s) (Number of Isolates)</u>
Adenovirus	Bell (1), Dallas (1)
Cytomegalovirus	Dallas (20), Lubbock (2), Galveston (5)
Coxsackie B2	Harris (1)
Echovirus 5	Harris (1)
Influenza A(H3N2)	Bexar (1), Harris (10), Travis (3), Hale (1)
Parainfluenza 1	Bell (3), Galveston (1)
Parainfluenza 3	Bell (3)
Rotavirus	Bell (15), Dallas (9), Harris (1), Lubbock (18), Travis (2)
Respiratory Syncytial Virus	Bell (23), Dallas (14), Lubbock (15)
Chlamydia trachomatis	Bell (33), Dallas (2), Lubbock (13), Travis (1)

TEXAS AIDS CASES: WEEKLY SURVEILLANCE REPORT

(Case Count by Date of Diagnosis)

January 15, 1988

	1980-1982		1983		1984		1985		1986		1987		CUMULATIVE	
COUNTY *	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS (CFR%)
BEXAR	3	3	13	12	9	7	27	20	43	23	38	8	133	73 55
BRAZORIA	0	0	0	0	1	1	7	7	9	4	3	1	20	13 65
BRAZOS	0	0	1	1	5	5	4	4	5	2	4	2	19	14 74
DALLAS	7	7	25	21	73	71	141	126	293	182	398	157	937	564 60
DENTON	0	0	0	0	1	1	1	1	5	2	8	6	15	10 67
EL PASO	0	0	2	2	1	1	2	2	8	5	17	4	30	14 47
FORT BEND	0	0	0	0	1	1	9	9	10	6	8	0	28	16 57
GALVESTON	0	0	1	1	4	3	5	5	13	10	20	6	43	25 58
HARRIS	27	25	76	73	179	157	315	254	543	324	441	106	1581	939 59
HIDALGO	0	0	0	0	3	3	3	3	0	0	4	2	10	8 80
JEFFERSON	1	1	0	0	2	1	4	4	8	1	14	5	29	12 41
LUBBOCK	0	0	1	1	0	0	3	3	5	2	6	2	15	8 53
MONTGOMERY	0	0	2	2	1	1	2	2	3	1	6	3	14	9 64
NUECES	0	0	0	0	4	3	2	1	11	7	18	2	35	13 37
ORANGE	0	0	0	0	1	1	2	2	4	2	4	0	11	5 45
TARRANT	1	1	1	1	7	6	31	24	38	17	85	24	163	73 45
TRAVIS	0	0	3	3	19	16	36	31	45	22	78	18	181	90 50
WALKER **	0	0	1	1	4	4	4	4	15	6	11	3	35	18 51
ALL OTHERS	0	0	5	5	13	12	43	35	88	50	105	37	254	139 55
STATEWIDE	39	37	131	123	328	294	641	537	1146	666	1268	386	3553	2043
	CFR%	95	CFR%	94	CFR%	90	CFR%	84	CFR%	58	CFR%	30	CFR%	58

* COUNTIES LISTED INDIVIDUALLY ARE THOSE WITH A CUMULATIVE TOTAL OF 10+ CASES.

** 26 CASES WERE DIAGNOSED WHILE TEXAS DEPARTMENT OF CORRECTION INMATES

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