

Traffic Safety Facts

Crash • Stats

DOT HS 810 870

A Brief Statistical Summary

December 2007

Fatalities Related to Alcohol-Impaired Driving During The Christmas and New Year's Day Holiday Periods

Summary

On average from 2001 to 2005 (the last year for which complete data is available), about 40 percent of all fatalities during the Christmas and New Year holiday periods have occurred in crashes where at least one of the involved drivers¹ was alcohol-impaired² as compared to about 28 percent of all fatalities during the rest of December. This year, NHTSA estimates³ that about 430 fatalities could potentially occur in motor vehicle traffic crashes during the Christmas and New Year Holiday periods in crashes involving an impaired driver. In 2007, both Christmas and New Year's fall on Tuesdays and hence both holiday periods are considered four-day⁴ holiday periods for reporting purposes.

This Crash•Stats presents data that highlight the higher rate of involvement of impaired drivers in fatal crashes during the two holiday periods in December and compares the trend with the rate of involvement during the rest of the days in December. The number of such fatalities per day (fatalities averaged over the number of days in the holiday) during the two holiday periods is higher as compared to fatalities per day during the rest of December.

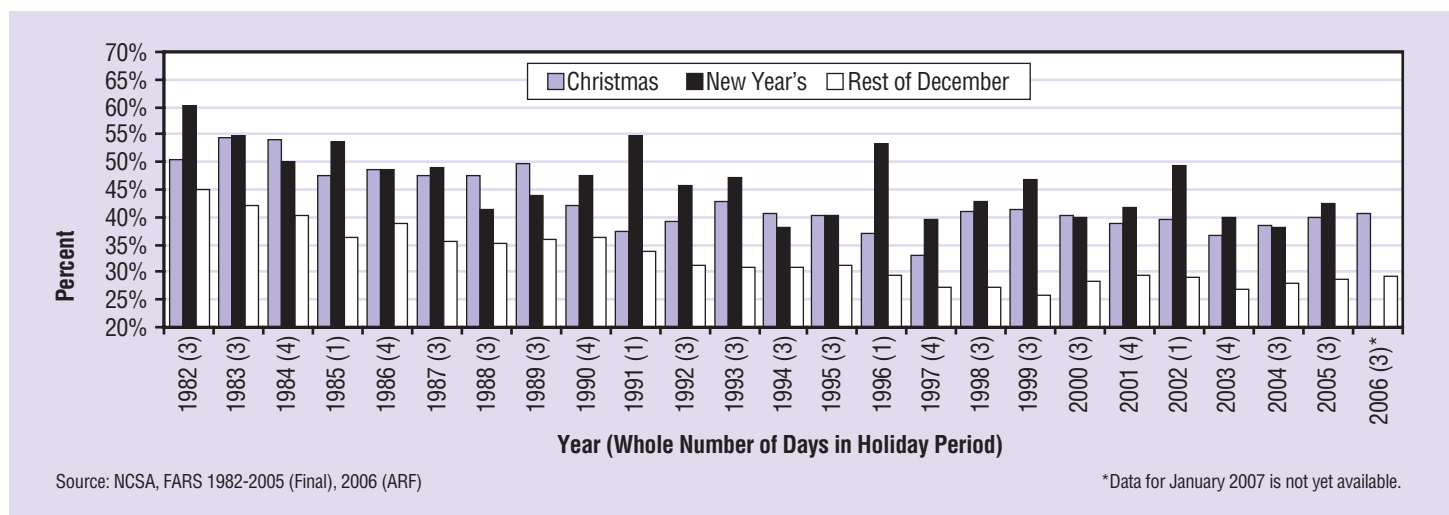
Results

Recent data from NHTSA's Fatality Analysis Reporting System (FARS, 2001 to 2005) show that fatalities associated with impaired driving, expressed as number of fatalities per day, are higher during the Christmas and New Year's Day holiday periods as compared to the fatalities occurring during the other days in December (See Table 1). In order to study overall trends in fatalities that occur in crashes involving at least one impaired driver, FARS data from 1982 to 2005 were used. Figure 1 presents the percent of all motor vehicle traffic fatalities that occur in such crashes during the two holiday

Table 1: Fatalities per Day in Crashes Involving an Impaired Driver by Holiday Period, 2001–2005

Holiday Period	Fatalities per Day	Percent of Total Fatalities
New Year's	54	41%
Christmas	45	38%
Rest of December	33	28%
Whole Year	36	31%

Figure 1: Fatalities that occur in crashes involving at least one impaired driver as a percent of all fatalities, 1982–2006



Source: NCSA, FARS 1982-2005 (Final), 2006 (ARF)

*Data for January 2007 is not yet available.

¹Drivers imply any motor vehicle drivers or motorcycle operators.

²Drivers or Motorcycle Operators with blood alcohol content (BAC) = .08 grams per deciliter or above.

³Based on a simple average of holiday weekends 3 or 4 days long from recent years [2001 – 2006].

⁴Beginning 6 p.m. the Friday before and ending 5:59 a.m. the Wednesday after.

periods in December and compares the data with those from the other days in December. The trend in Figure 1 shows that in most of the years, the percent of all fatalities that occur in crashes involving at least one impaired driver is the highest during the New Year's Day holiday period followed by the percentage during the Christmas holiday period. These percentages are consistently higher than that for the other days in December. Please note that the **New Year's Day holiday period for a given year shown in Figure 1 includes the holi-**

day period towards the end of the December for the year as well as the period falling on the next year. For Example, the 1982 New Year's Day Holiday Period includes 6 p.m. on 12/30/82 to 6 a.m. on 1/03/83.

Since the number of days covered in the holiday periods varies over the years, it will be noteworthy to compare the average number of fatalities per day for each holiday period. Table 2 depicts this comparison.

Table 2: Fatalities per Day in Crashes Involving At Least One Driver With BAC=.08+ by Holiday Period, 1982-2005

Year	Christmas Holiday Period				New Year Holiday Period**				Rest of December			
	Days*	Total Fatalities	Involving At Least One Impaired Driver		Days*	Total Fatalities	Involving At Least One Impaired Driver		Days*	Total Fatalities	Involving At Least One Impaired Driver	
			Fatalities	Fatalities per Day*			Fatalities	Fatalities per Day*			Fatalities	Fatalities per Day*
1982	3	455	230	66	3	371	224	64	26	3,058	1,376	52
1983	3	352	191	55	3	345	189	54	26	3,008	1,266	48
1984	4	638	346	77	4	493	246	55	23	2,812	1,130	49
1985	1	152	72	48	1	222	119	79	29	3,213	1,161	40
1986	4	506	246	55	4	534	259	58	26	3,196	1,243	47
1987	3	409	194	55	3	406	199	57	27	3,436	1,226	45
1988	3	511	243	69	3	443	184	53	26	3,515	1,232	47
1989	3	551	273	78	3	420	184	53	25	3,220	1,156	46
1990	4	564	238	53	4	438	208	46	23	2,685	973	42
1991	1	131	49	33	1	164	90	60	29	3,024	1,022	35
1992	3	409	160	46	3	370	169	48	27	2,869	891	33
1993	3	401	172	49	3	370	174	50	26	2,819	869	33
1994	3	453	184	53	3	392	150	43	26	2,978	923	35
1995	3	351	142	41	3	419	169	48	25	2,919	913	36
1996	1	167	62	41	1	191	102	68	29	3,438	1,010	35
1997	4	476	158	35	4	540	213	47	26	3,093	838	32
1998	3	362	148	42	3	354	151	43	27	3,276	898	33
1999	3	480	198	57	3	467	219	63	26	2,988	776	30
2000	3	441	177	51	3	356	142	41	25	2,805	791	31
2001	4	601	233	52	4	571	238	53	23	2,743	808	35
2002	1	131	52	35	1	217	107	71	29	3,395	991	34
2003	4	519	191	42	4	563	225	50	27	2,986	801	30
2004	3	388	149	43	3	472	180	51	25	3,062	858	34
2005	3	402	160	46	3	454	193	55	25	2,977	851	34
2006	3	392	160	46	3	N/A	N/A	N/A	25	2,797	812	32

Source: NCSA FARS 1982-2005 (Final), 2006 (ARF)

*Days as displayed are number of whole days in holiday period. However, to compute fatalities per day, the six-hour periods (0.25 days) leading to and following the whole days in the holiday period are included. For example, to compute the rate for 1982, the number of days is 3+0.25+0.25=3.5 days.

**New Year Holiday period for each year includes the holiday period towards the end of the December for the year as well as the period falling on the next year. For Example, the 1982 New Year's Day holiday period includes 6 p.m. on 12/30/82 to 6 a.m. on 1/03/83.

As seen in Table 2, the average number of fatalities in crashes involving at least one impaired driver per day during both of the holiday periods is greater than the average for the rest of December. In recent years, on an average, the magnitude of this difference is 60 percent higher for the New Year's Day holiday period and about 40 percent higher for the Christmas

holiday period. However, during years in which the holiday is just one day, it is noteworthy that the number of fatalities per day for New Year's Day is much higher (almost twice) than that for Christmas Day and for the rest of December.

In summary, fatalities in crashes that involve one or more impaired drivers appear to increase significantly during the Christmas and New Year's Day holiday periods. The number of fatalities per day of the holiday period in such crashes during both the Christmas Day and New Year's Day holiday periods is significantly higher than the fatalities per day for the rest of December.

