

Traffic Safety Facts

Crash•Stats

Fatalities Related to Impaired Driving During the Christmas and New Year's Day Holiday Periods

Introduction

In the past, about 45 percent of all fatalities during the Christmas and New Year holiday periods, on an average, have occurred in crashes where at least one of the involved drivers was impaired¹ as compared to about 30 percent of all fatalities during the rest of December. This year, NHTSA's projections² show that an estimated total of 410 persons will be fatally injured in motor vehicle traffic crashes during each of the three-day Christmas Holiday and New Year Holiday Periods. If the trend continues, about 185 persons will be killed in crashes involving an impaired driver during each of the two holiday periods.

This Crash•Stats presents data that highlights 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.

Table 1
Fatalities per Day in Crashes involving an Impaired Driver by Holiday Period, 1998-2003

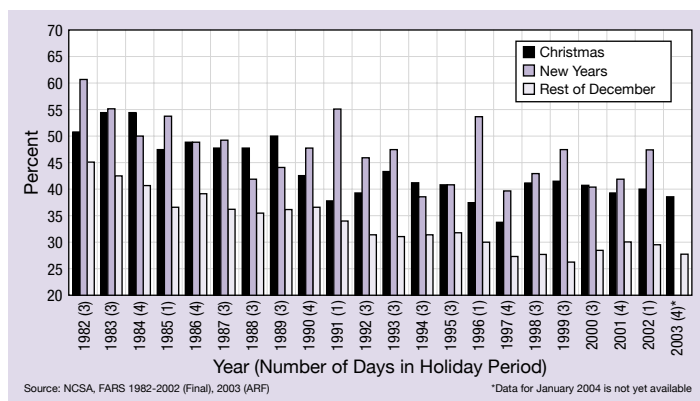
Holiday Period	Fatalities per Day	Percent of Total Fatalities
New Year's Day	52	42%
Christmas	49	40%
December Weekends	45	40%
December Weekdays	25	21%
Whole Year	36	31%

Results

Recent data from NHTSA's Fatality Analysis Reporting System (FARS, 1998 to 2002) show that fatalities associated with impaired driving, expressed as number of fatalities per day, are higher during the Christmas and New Year Day Holiday periods as compared to the fatalities occurring during the other weekends in December as well as weekdays in December leading up to the holiday period. In order to study overall trends in fatalities that occur in crashes

involving at least one impaired driver, FARS data from 1982 to 2003 were used. Figure 1 presents the percent of all motor vehicle traffic fatalities that occur in such crashes during the two holiday 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. **The New Year Day's holiday period for a given year shown in Figure 1 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 6pm on 12/30/82 to 6am on 1/03/83.**

Figure 1
Fatalities That Occur in Crashes Involving at Least One Impaired Driver as a Percent of All Fatalities



Of all motor vehicle fatalities that occurred, a greater percent during the two holiday periods occurred in crashes that involved at least one impaired driver as compared to the other days in December. Also, for most of the years in the period from 1982 to 2003, the percentage for New Year's Day Holiday period was greater than the percentage for the Christmas Day holiday period. 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.

¹With BAC = 0.08 g/dl or above.

²Using methodology outlined in *Time Series Analysis and Forecast of Crash Fatalities during Six Holiday Periods* DOT HS 809 718

Table 2

Fatalities and Fatalities per Day in Crashes Involving at Least One Driver with BAC=0.08+ by Holiday Period, 1998-2003

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	216	101	67	29	3,395	991	34
2003	4	512	194	49	4	N/A	N/A	N/A	27	2,988	811	30

Source: NCSA FARS 1982-2002 (Final), 2003 (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 e□. For Example, the 1982

New Year's Day Holiday Period includes 6pm on 12/30/82 to 6am 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. On an average, the magnitude of this difference is 40 percent higher for the Christmas and New Year's Day Holiday periods. However, during years in which the holiday is just one day, for additional copies of this publication, please call 1-800-934-8517 or fax your request to (202) 366-3189. For questions regarding the data reported in this publication, contact Rajesh Subramanian [202-366-5371]. Internet users may access this publication and other general information on highway traffic safety at: <http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html> 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.

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