

1996  
**Motor Vehicle  
Occupant Safety Survey**  
**Volume 4:**

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Crash Injury and Emergency  
Medical Services Report



U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**

**NTSA**  
People Saving People  
<http://www.nhtsa.dot.gov>

1. Report No. DOT HS 808 633		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle 1996 Motor Vehicle Occupant Safety Survey, Volume 4: Crash Injury and Emergency Medical Services Report				5. Report Date November 25, 1997	
				6. Performing Organization Code	
7. Author(s) John Boyle, Ph.D. and Stephen Dienstfrey, M.A.				8. Performing Organization Report No. 6099:4	
9. Performing Organization Name and Address Schulman, Ronca & Bucuvalas, Inc. 8403 Colesville Road, Ste. 820 Silver Spring, MD 20910				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. DTNH22-93-D-05135	
12. Sponsoring Agency Name and Address National Highway Traffic Safety Administration Office of Research and Traffic Records 400 7th St. S.W. Washington D.C. 20590				13. Type of Report and Period Covered Final Report	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract					
<p>The National Highway Traffic Safety Administration (NHTSA) commissioned the research firm of Schulman Ronca &amp; Bucuvalas, Inc. (SRBI) to conduct the 1996 Motor Vehicle Occupant Safety Survey. Between November 4, 1996 and January 5, 1997 SRBI conducted a total of 8,210 telephone interviews among a national population sample. The percentages provided in the report are weighted to accurately reflect the national population age 16 or over. This report is a follow-up to the 1994 Motor Vehicle Occupant Safety Survey, thereby permitting comparisons of the public's attitudes and behavior regarding emergency medical services and related issues between 1994 and 1996.</p> <p>As in the 1994 survey, the 1996 version asked respondents if they had ever been involved in a vehicle crash; their willingness to stop to help at a vehicle crash site to assist victims or call for help; their experience with, knowledge of, and expectations for emergency medical services; the availability and use of cellular or car phones; and their willingness to take emergency or first aid training to assist crash victims.</p>					
17. Key Words emergency medical services "EMS" vehicle crashes survey vehicle injuries attitudes traffic safety "9-1-1"			18. Distribution Statement Document is available through the National Technical Information Service, Springfield, VA 22161		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 68	22. Price

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# **Crash Injury and Emergency Medical Services as reported in the 1996 Motor Vehicle Occupant Safety Survey**

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## **Introduction**

This report summarizes findings related to emergency medical services (EMS) and crash injury experience from a national telephone survey of the general public on occupant protection issues. Specifically, the data used in this report were collected as part of the National Highway Traffic Safety Administration (NHTSA) 1996 Motor Vehicle Occupant Safety Survey.

The report begins by presenting findings on the general public's crash injury experience. This is followed by information on the concerns that the public has about stopping at a crash scene to help victims, their willingness to stop or phone for help, and their use of car phones to report emergencies. Discussed next are issues related to the public's knowledge and use of EMS. Topics include the public's awareness of what the initials "EMS" stand for, their use of 9-1-1 or another emergency number, expectations concerning EMS response time for medical emergencies, and confidence in the skills of EMS personnel. This is followed by data on the public's interest in taking training to assist crash victims. The report concludes by comparing findings from the current study to findings from a similar survey conducted by NHTSA in 1994.

## **Methodology**

The 1996 Motor Vehicle Occupant Safety Survey was conducted by Schulman, Ronca & Bucuvalas, Inc. (SRBI), a national survey research organization. SRBI conducted a total of 8,210 telephone interviews among a national population sample. To limit the survey length, SRBI separated the questionnaire into two versions. A total of 4,188 interviews were completed in Version 1 and 4,022 completed interviews in Version 2. Although some questions were used in both versions, each had its own set of distinct topics. The bulk of the "EMS" related topics were in the Version 2 questionnaire. For each sample only persons age 16 and older, including oversamples of persons age 16-39, were interviewed. The procedures used in the survey yielded national estimates of the target population within specified limits of expected sampling variability, from which valid generalizations can be made to the general public.

The survey was fielded from November 4, 1996 to January 5, 1997. This is approximately the same time period in which the 1994 Occupant Protection Survey was conducted

(October 5, 1994 to December 11, 1994). For a complete description of the methodology and sample disposition, including computation of weights, refer to the 1996 Motor Vehicle Occupant Safety Survey, Volume 1: Methodology Report.

The percentages provided in the following report are weighted to accurately reflect the national population age 16 or over. Unweighted sample sizes ("N's") are included so that readers know the exact number of respondents answering a given question and allowing the reader to estimate sampling precision. Percentages for some items may not add to 100 percent due to rounding, or because the question allowed for more than one response.

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

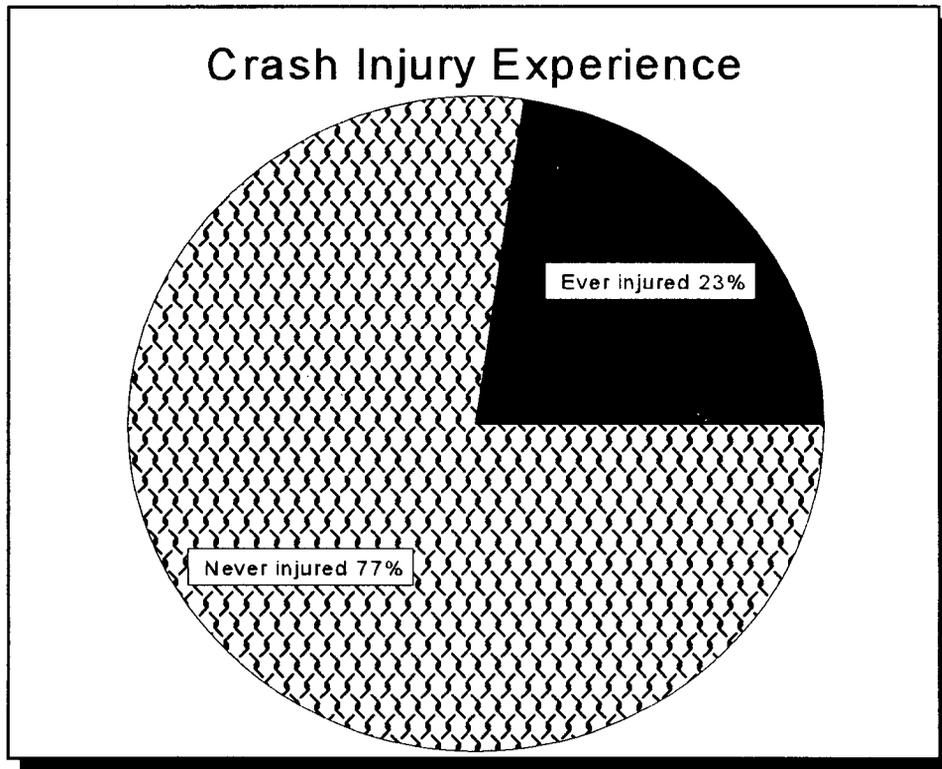
# **SECTION 1**

## **1996 SURVEY RESULTS**

## INJURIES IN VEHICLE CRASHES

Almost one person in four (23%) age 16 and over reported ever having been injured in a vehicle crash where they required medical attention (see Figure 1). The proportions for males and females are very close to the overall proportion — 22% and 24% respectively.

FIGURE 1



*Qx: Have you ever been injured in a vehicle accident? Only count injuries that required medical attention.*

*Base: Total population age 16 and over.*

*Unweighted N=8,210*

1996 Motor Vehicle Occupant Safety Survey  
 Crash Injury & Emergency Medical Services

About one-third (32%) of those who have ever been injured in a motor vehicle crash incurred a crash related injury in the last five years (Table 1).

TABLE 1

**When Most Recent Crash-Related Injury Occurred**

Qx: *How long ago did [that/the most recent] accident occur?*

Base: *Ever injured in a vehicle accident.*

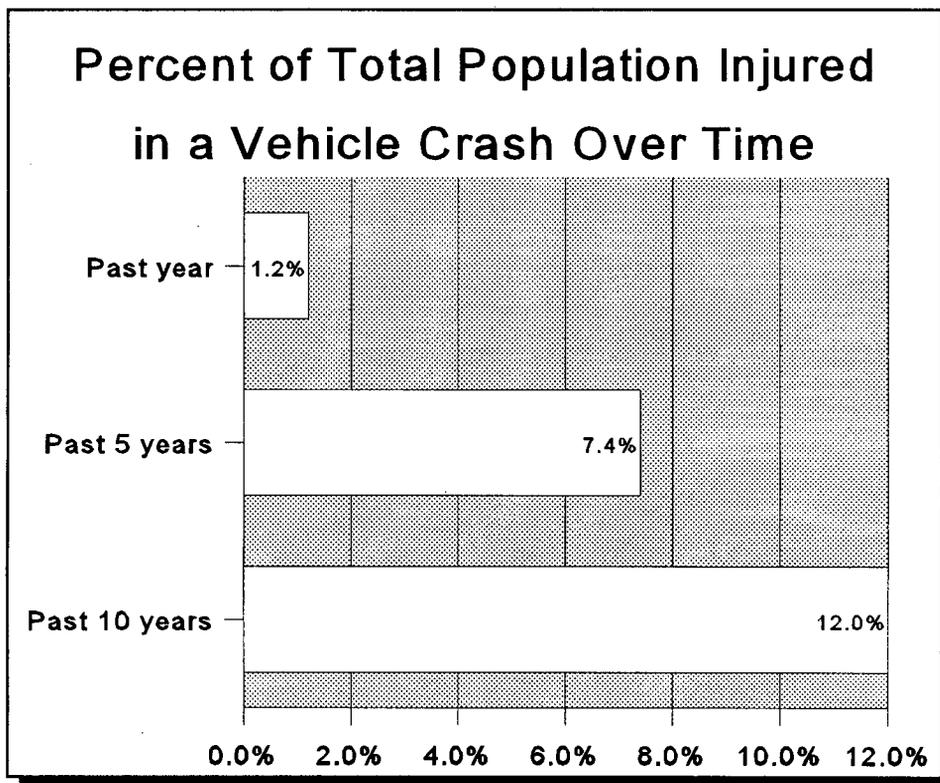
Unweighted N=1,974

Within the past year . . . . .	5%
1 year ago . . . . .	5%
2 years ago . . . . .	6%
3 years ago . . . . .	6%
4 years ago . . . . .	4%
5 years ago . . . . .	6%
6 to 9 years ago . . . . .	13%
10 to 14 years ago . . . . .	14%
15 to 19 years ago . . . . .	8%
20 to 29 years ago . . . . .	16%
30 or more years ago . . . . .	15%
Don't know/refuse . . . . .	2%

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

Another way to look at these data is to ask what proportion of the total population age 16 and older has been injured in a crash in the last year, the last five years, or the last 10 years. This analysis shows that 1.2% of the total population under consideration were injured in a crash in the last year (see Figure 2), 7.4% of the total population were injured in a crash in the last five years (this includes those who were injured in a crash in the last year), and 12.0% of the population were injured in a crash in the last ten years.

FIGURE 2



Qx: *Have you ever been injured in a motor vehicle accident? Only count injuries that required medical attention.*

Qx: *How long ago did [that/the most recent] accident occur?*

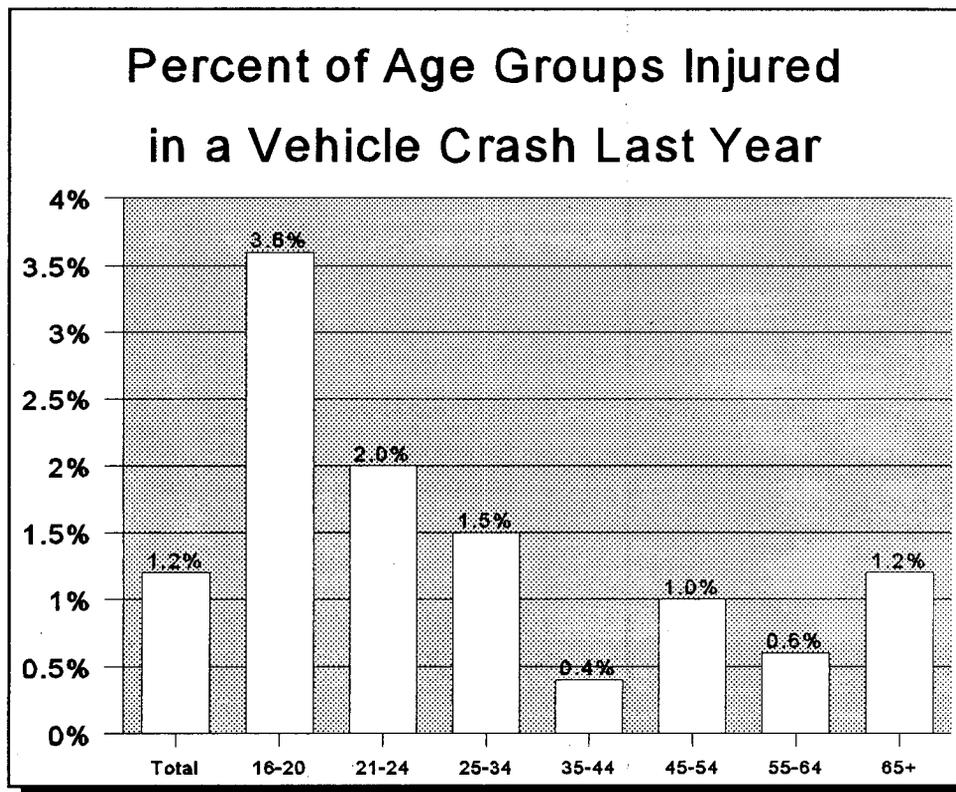
Base: *Total population age 16 and over.*

Unweighted N=8,210

1996 Motor Vehicle Occupant Safety Survey:  
Crash Injury & Emergency Medical Services

The prevalence of crash-related injuries in the last year was highest among those in the 16 to 20 age group, at 3.6% (see Figure 3). This age group comprised one-fourth of all persons who sustained crash-related injuries in the past year, and showed a rate three times the population average of 1.2%. They also had nearly twice the rate of those in the 21 to 24 age group, the group with the second highest rate (2.0%). The rate dropped to 1.5% of those in the 25 to 34 age group. The remaining age groups had rates at or below the national average with those in the 35 to 44 and 55 to 64 age groups well below the average.

FIGURE 3

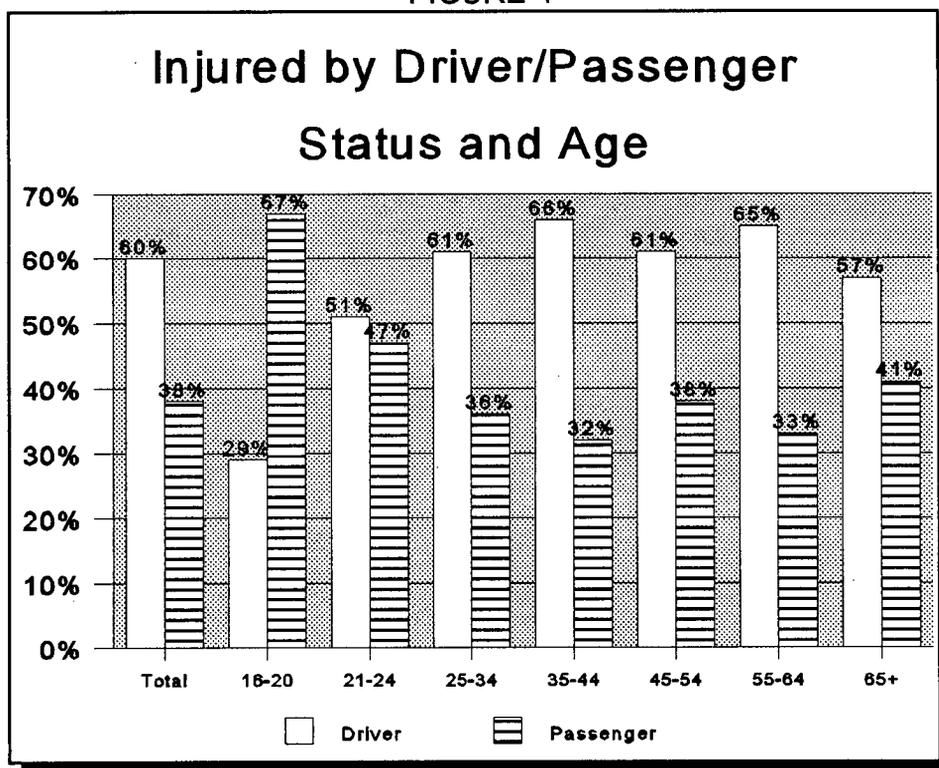


Qx: How long ago did [that/the most recent] accident occur?  
Base: Total population 16 and over.  
Unweighted N=8,210

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

Three in five (60%) of those injured in (most recent) vehicle crashes were drivers. The bulk of the remaining crash victims (38%) were passengers, but a handful were pedestrians (1%). The proportion who were drivers increases with age. Only about three in ten (29%) of those injured in the 16 to 20 age group were drivers. This proportion rises to just over half (51%) for those in the 21 to 24 age group and stays in the 61% to 66% range for all age groups between 25 and 64 before it declines to 57% for those over 65 (see Figure 4). While the survey does not provide specific information as to why the 16 to 20 age group differs so markedly from those 21 and over, it is possible to speculate. A possible reason might be that this group has the highest proportion of non-drivers. In addition, it is possible that persons in this group ride with older drivers or travel together.

FIGURE 4



Qx: Were you a driver or a passenger in that accident?

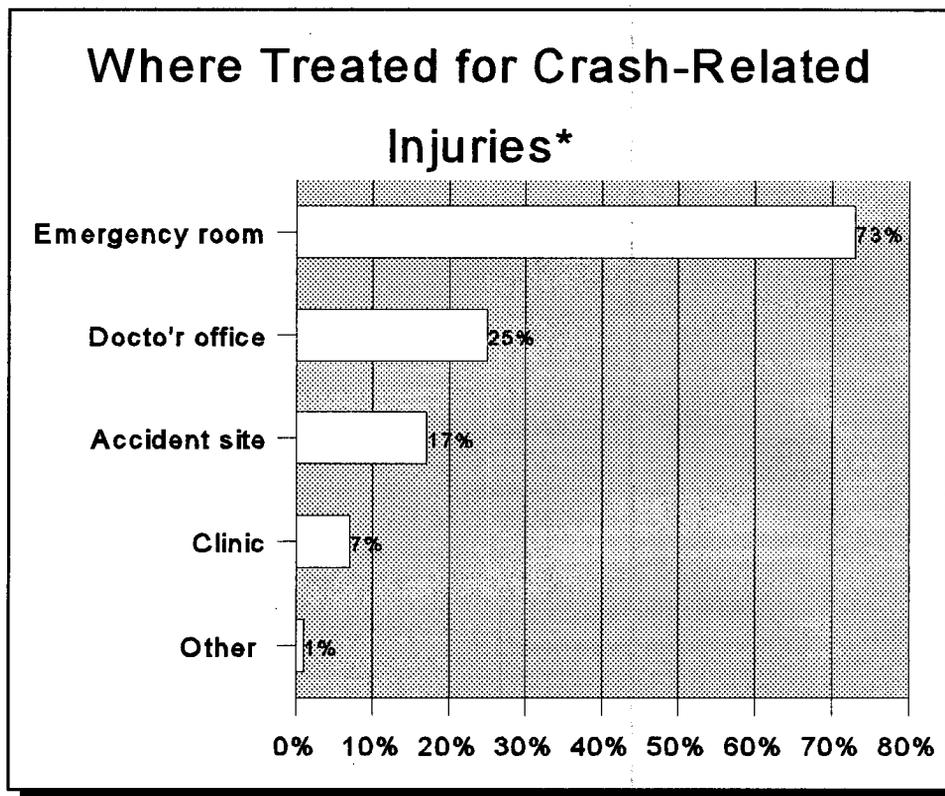
Base: Ever injured in a vehicle accident.

Unweighted N=1,974

## TREATED FOR CRASH INJURIES

Those who received a crash-related injury requiring medical attention were asked where they were treated for those (most recent) injuries. They were given the opportunity to report more than one type of treatment site if, in fact, they received treatment for those injuries at more than one place. Almost three in four (73%) were treated in a hospital emergency room. Additionally, one fourth (25%) reported being treated in a doctors office, about one sixth (17%) were treated at the crash site, 7% were treated at a clinic, and only 1% mentioned some other location (see Figure 5).

FIGURE 5



Qx: At which of the following were you treated for your injuries?

Base: Ever injured in a vehicle accident.

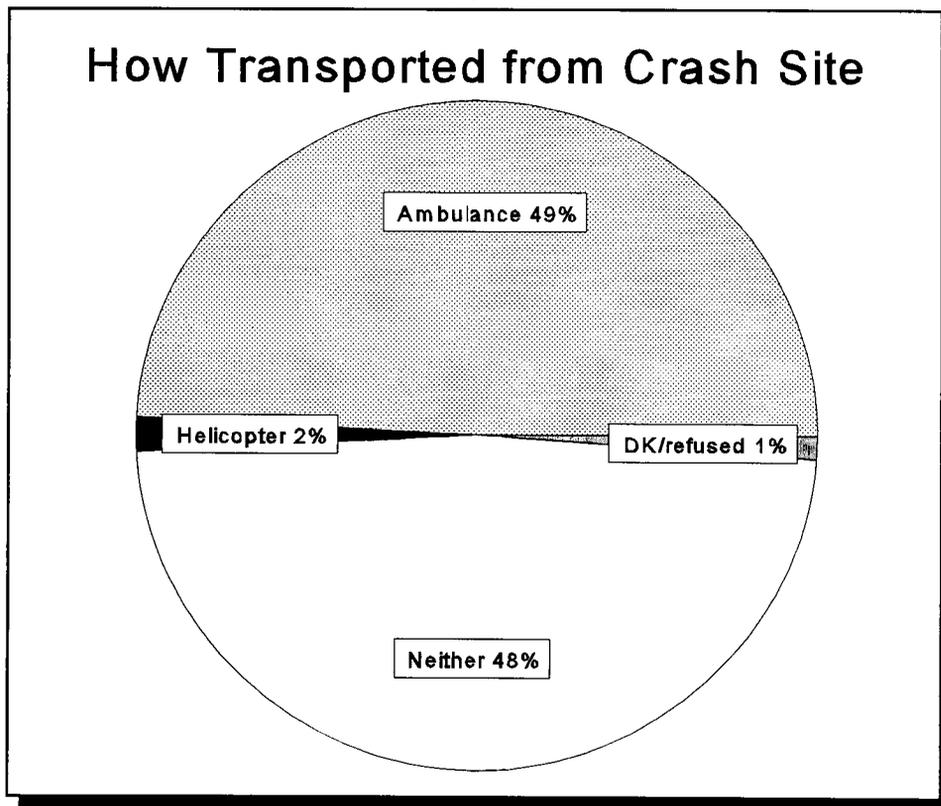
Unweighted N=1,974

\* Total exceeds 100% since multiple responses were accepted.

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

Slightly over half (51%) of those injured in a vehicle crash were transported to another location for treatment by ambulance (49%) or helicopter (2%). The remaining proportion of individuals who were ever injured in a vehicle crash were not transported by either of these modes (48%), or did not know or refused to answer (1%).

FIGURE 6



**Qx:** *Were you transported from the accident scene by ambulance or helicopter?*

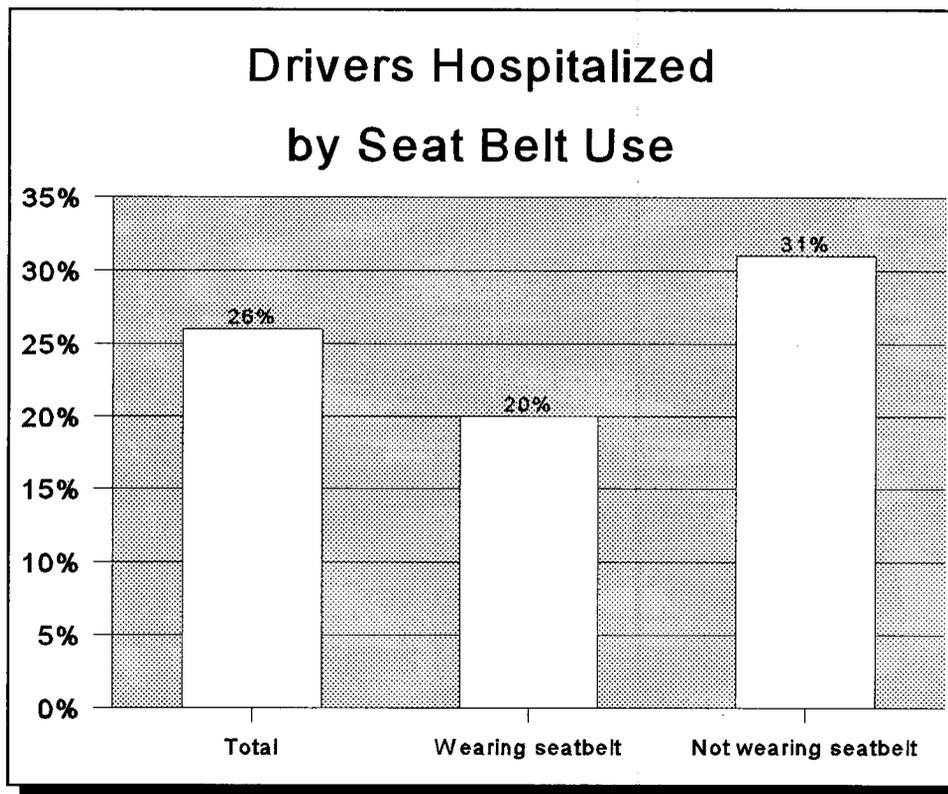
**Base:** *Ever been injured in a vehicle accident.*

*Unweighted N=1,974*

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

About one in four (26%) of those who were injured in a (most recent) vehicle crash were hospitalized for at least one night. There was little variation in the rate of hospitalization for crash injuries among population subgroups. However, use of seatbelts at the time of the crash made a difference in hospitalization outcomes. One person in five (20%) who was wearing a seat belt at the time of the crash was hospitalized for at least one night compared to three in ten (31%) who were not wearing a seat belt at the time of the crash (see Figure 7).

FIGURE 7



Qx: Were you hospitalized for at least one full night?

Qx: Were you wearing your seatbelt at the time of the accident?

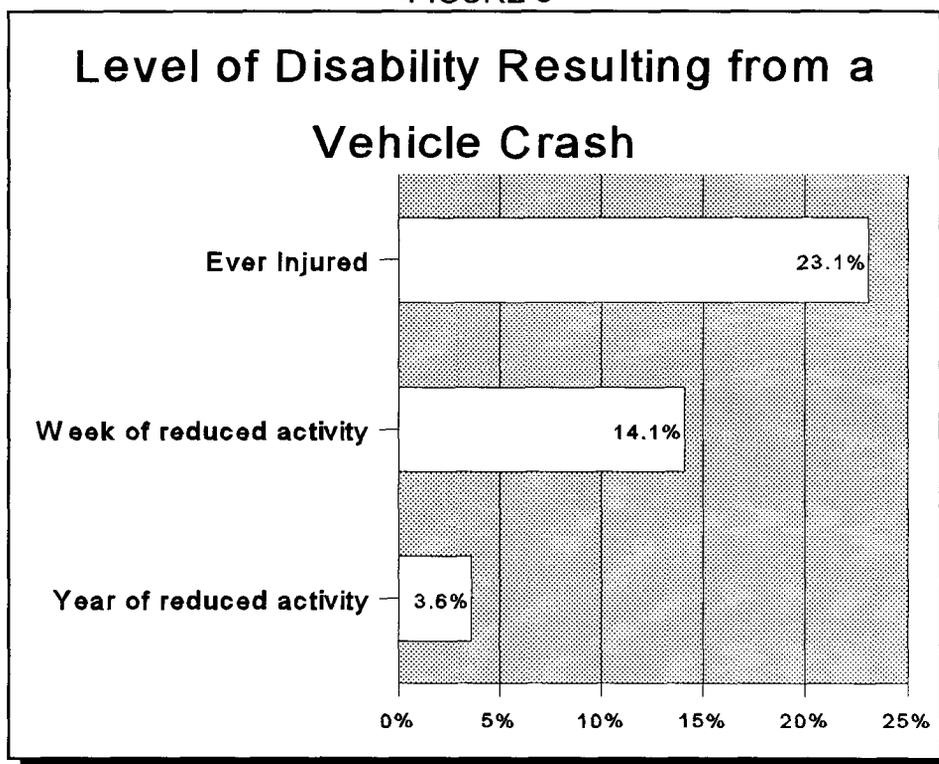
Base: Ever been injured in a vehicle accident.

Unweighted N=1,974

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

As was mentioned earlier (Figure 1, page 3), 23.1% of the total population was injured at some point in the past in a vehicle crash to the extent of needing medical attention. About three-fifths of those ever injured, 14.1% of the total population, have at some time been unable to perform normal activities (work, school, household) for at least a week because of a crash (see Figure 8). In addition, about one-quarter of these who had reduced activities for a week, 3.6% of the total population, were unable to fully resume normal activities a year after the crash.

FIGURE 8



Qx: *Have you ever been injured in a motor vehicle accident? Only count injuries that required medical attention.*

Qx: *Have you ever received injuries from a vehicle accident that prevented you from performing any of your normal activities (work, school, household) for at least a week?*

Qx: *Were there any activities that you were unable to resume because of your injuries even a year after the accident?*

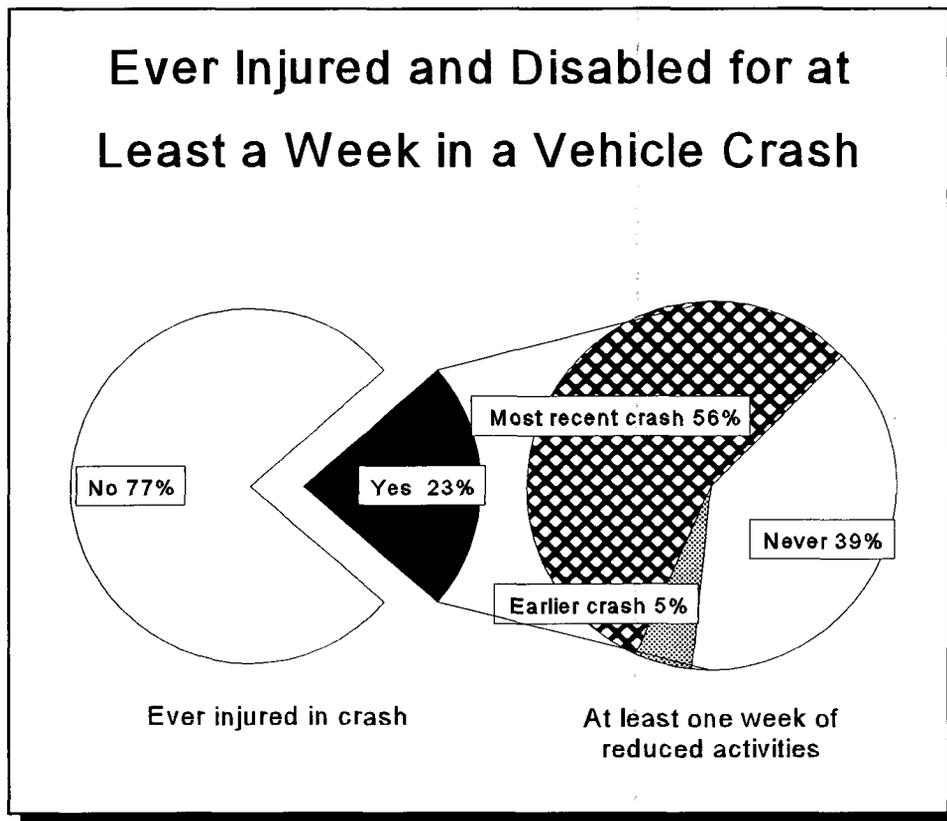
Base: *Total population age 16 and over.*

*Unweighted N=8,210*

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

Less than one person in four (23%) has ever been injured in a motor vehicle crash to the point where they required medical attention. About three persons in five of those ever injured (61%) were injured to the point where they were unable to perform some of their normal activities (work, school, household) for at least a week either in the most recent (56%) or an earlier (5%) vehicle crash (see Figure 9). The remaining 39% needed medical attention for their injuries, but were able to perform all normal activities within one week of their crashes.

FIGURE 9



Qx: *Have you ever been injured in a motor vehicle accident? Only count injuries that required medical attention.*

Qx: *Have you ever received injuries from a vehicle accident that prevented you from performing any of your normal activities (work, school, household) for at least a week?*

Base: *Total population age 16 and over.*

*Unweighted N=8,210*

## CONCERNS ABOUT STOPPING AT A CRASH

About half (52%) of the driving age public said they would have no concerns about stopping to help if they saw a crash where no one was at the scene to help (Table 2, next page). The most commonly mentioned reason for not stopping is the perception of not knowing how to provide assistance (16%). Almost of equal mention (15%) are concerns about personal safety, primarily the possibility that the crash is a ploy to trick people to stop. The third most often mentioned concern is the fear of being sued for giving improper assistance (12%). The possibility of causing further injury to the victim is cited by 5% as a concern about stopping to help.

Females were more concerned about stopping at the site of a crash than were males. Where almost three out of five (58%) males had no concern about stopping, less than half (47%) of females had no concerns. Females were almost twice as concerned as males (20% vs. 11%) about not knowing what to do should they stop. They were also more concerned about their personal safety than were males (17% vs. 13%), particularly about the possibility that the crash could be a ploy to lure and harm innocent people (10% vs. 6%). Females, however, were less concerned about the possibility of lawsuits resulting from offering improper assistance than were males (11% vs. 14%). In fact, the possibility of being sued was the most common concern given by males for not stopping.

Overall, Blacks and Hispanics expressed fewer concerns about stopping at the site of a crash than did Whites (60%-64% vs. 50%) (see Table 3 on page 14). When it came to concerns about stopping, Whites and Hispanics were more concerned about being unable to offer the correct assistance (17% and 15%) than were Blacks (11%). While Whites were the most concerned about personal safety (16%), one in eight Blacks (12%) and one in eleven Hispanics (9%) mentioned this concern. Whites and Blacks seemed more concerned (8% for both) about the possibility of being lured by a ploy to hurt innocent people than were Hispanics (5%). Whites also were more concerned about the possibility of a lawsuit arising out of improper assistance than Blacks or Hispanics (14% vs. 4%-5%).

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

TABLE 2

**Concerns About Stopping to Help at a Vehicle Crash by Gender**

Qx: *Suppose that you are driving, you see an accident happen and no one is there at the scene to help. What concerns might you have about stopping to help? Anything else?*

[Multiple responses were accepted.]

Base: *Total population age 16 and over.*

	Total	Male	Female
<i>Unweighted N (total population)</i>	4,022	1,894	2,121
<b>No concern/would stop to help or call</b>	<b>52%</b>	<b>58%</b>	<b>47%</b>
<b>Assistance (net)</b>	<b>16%</b>	<b>11%</b>	<b>20%</b>
Not knowing how to help/what to do	16%	11%	20%
People already there	*	*	*
<b>Personal safety (net)</b>	<b>15%</b>	<b>13%</b>	<b>17%</b>
Ploy to hurt innocent people	8%	6%	10%
Concern for my safety	3%	3%	3%
Fear of contracting HIV	2%	2%	3%
Ability to stop safely	2%	2%	1%
Depends on safety of location	1%	*	1%
Safety of family, kids, other occupants	*	*	1%
Risk of fire, flames, or explosion	*	*	*
Depends on time of day	*	*	*
<b>Lawsuits/liability for improper assistance</b>	<b>12%</b>	<b>14%</b>	<b>11%</b>
<b>Victim's safety (net)</b>	<b>6%</b>	<b>6%</b>	<b>6%</b>
Possibility of causing further injury	5%	5%	5%
Depends on type of injury, seriousness of crash	1%	1%	*
Extent of injuries	1%	1%	*
<b>Other</b>	<b>2%</b>	<b>2%</b>	<b>3%</b>
Don't want to see dead, mangled bodies	*	*	1%
If I were rushed, late, in a hurry	*	*	*
Other	2%	1%	2%
<b>Don't know/refuse</b>	<b>4%</b>	<b>3%</b>	<b>5%</b>

\* Less than 0.5%.

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

TABLE 3

**Concerns About Stopping to Help at a Vehicle Crash by Race & Ethnicity**

Qx: Suppose that you are driving, you see an accident happen and no one is there at the scene to help. What concerns might you have about stopping to help? Anything else?

[Multiple responses were accepted.]

Base: Total population age 16 and over.

	White	Black	Hispanic
<i>Unweighted N (total population)</i>	3,188	379	355
<b>No concern/would stop or call to help</b>	<b>50%</b>	<b>60%</b>	<b>64%</b>
<b>Assistance (net)</b>	<b>17%</b>	<b>11%</b>	<b>15%</b>
Not knowing how to help/what to do	17%	11%	15%
People already there	*	*	-
<b>Personal safety (net)</b>	<b>16%</b>	<b>12%</b>	<b>9%</b>
Ploy to hurt innocent people	8%	8%	5%
Concern for my safety	3%	2%	1%
Fear of contracting HIV	3%	1%	1%
Ability to stop safely	2%	1%	2%
Depends on safety of location	1%	-	-
Safety of family, kids, other occupants	*	-	1%
Risk of fire, flames, or explosion	*	*	-
Depends on time of day	*	-	*
<b>Lawsuits/liability for improper assistance</b>	<b>14%</b>	<b>4%</b>	<b>5%</b>
<b>Victim's safety (net)</b>	<b>6%</b>	<b>7%</b>	<b>3%</b>
Possibility of causing further injury	5%	4%	2%
Depends on type of injury, seriousness of crash	*	2%	*
Extent of injuries	*	1%	1%
<b>Other</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>
Don't want to see dead, mangled bodies	1%	*	-
If I were rushed, late, in a hurry	*	*	*
Other	2%	2%	2%
<b>Don't know/refuse</b>	<b>4%</b>	<b>7%</b>	<b>6%</b>

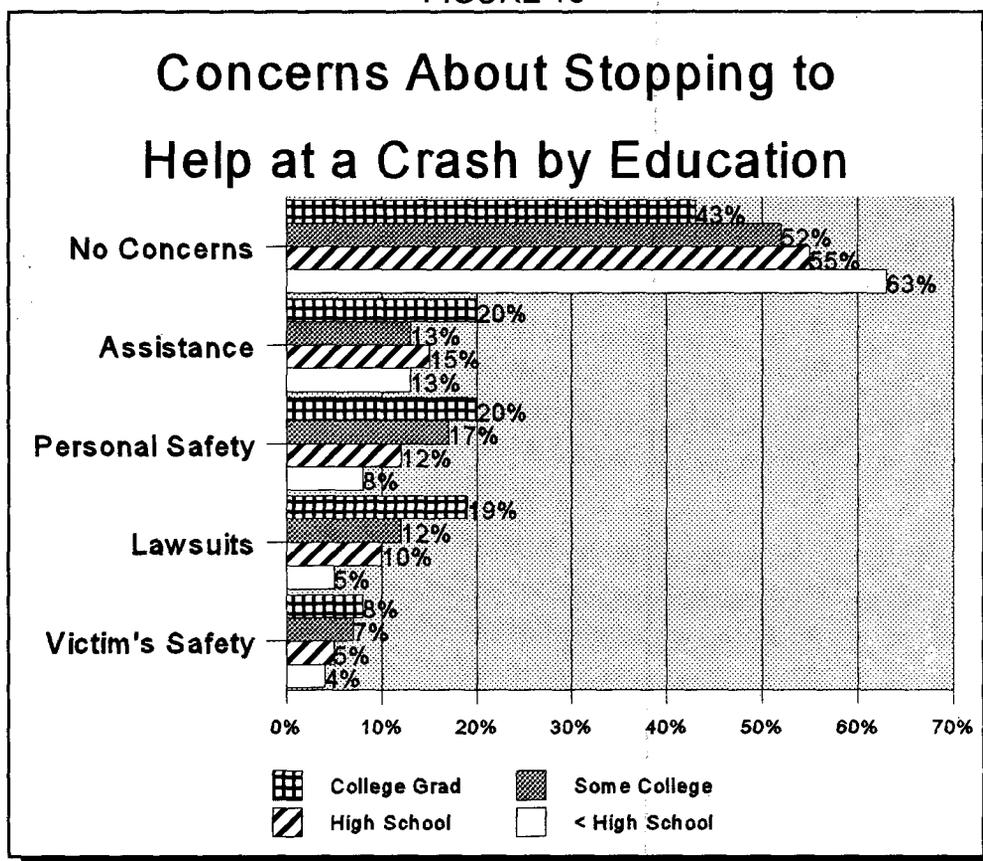
\* Less than 0.5%.

- None.

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

While there was no discernible relation between concerns about stopping and age, there was one with regard to education. Willingness to stop decreased as education increased starting with 63% of those who had less than a high school education and decreasing to 55% of those who graduated high school, to 52% of those with some college, and ending with 43% — fully 20 points lower than those with less than a high school education — of college graduates (see Figure 10).

FIGURE 10



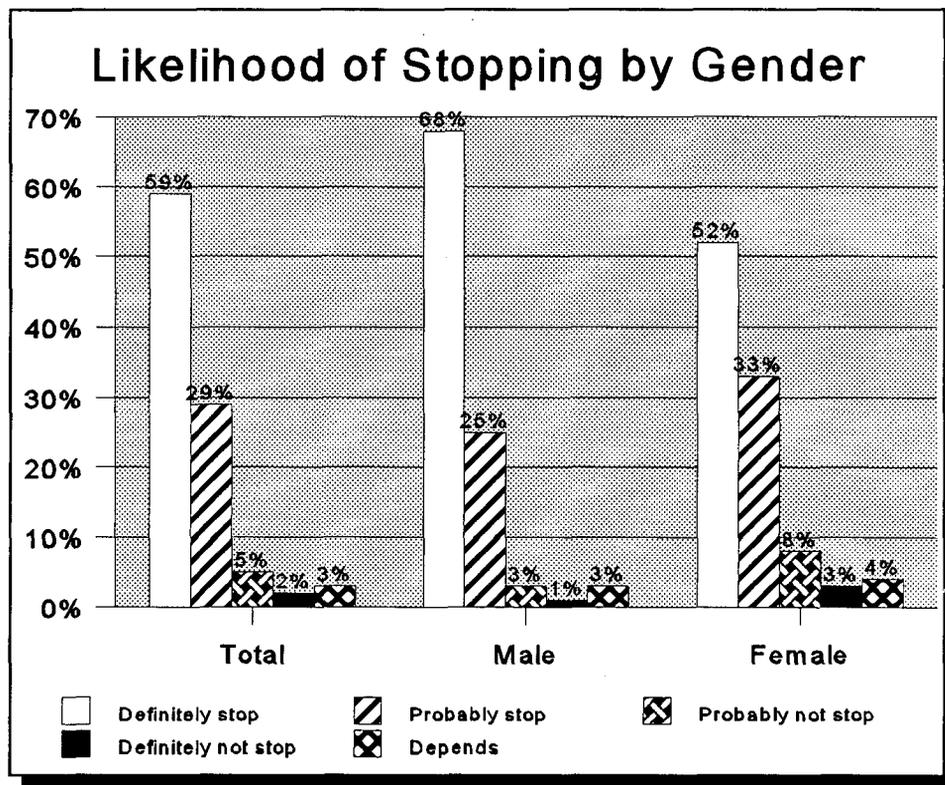
Qx: Suppose that you are driving, you see an accident happen and no one is there at the scene to help. What concerns might you have about stopping to help? Anything else? [Multiple responses were accepted.]

Base: Total population age 16 and over.  
Unweighted N=4,022

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After being asked about *concerns* they might have about stopping to help at a crash site, respondents were asked how likely they would be to stop (see Figure 11). Overall about three in five (59%) felt they definitely would stop. An additional three in ten (29%) said they probably would stop. By contrast, 5% felt they "probably would not stop" and 2% believed they "definitely would not stop". In addition 3% said "it depends".

FIGURE 11



Qx: How likely would you be to stop? Do you think you ...  
Base: Total population age 16 and over.  
Unweighted N=4,022

Earlier, the survey found that females were more concerned than males about stopping at a crash scene (Table 2, page 13). Similarly, females (52%) were significantly less likely than males (68%) to respond that they would *definitely* stop (Figure 10). This is somewhat offset by the fact that females were more likely to say they *probably* would stop than males. (33% vs. 25%). However, females were about three times more likely than males to say they probably (8% vs. 3%) or definitely (3% vs. 1%) would not stop.

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Those who said something other than they "definitely would stop" were asked what would prevent them from stopping if they "saw an accident and no one was there to help". About one in seven (14%) said nothing would keep them from stopping (see Table 4). The single most mentioned reason (17%) for not stopping was the fear of the crash being some ploy to hurt innocent people. The second most mentioned reason (12%) was the fear of not knowing what to do. No other reason was mentioned by more than one out of ten.

TABLE 4

<b>Reasons for Not Stopping</b>			
<i>Qx: What would prevent you from stopping?</i>			
<i>Base: Did not say "definitely would stop" if saw an accident and no one is there to help.</i>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
<i>Unweighted N</i>	1,607	604	1,000
<b>Nothing to prevent stopping</b>	<b>14%</b>	<b>13%</b>	<b>14%</b>
<b>Mentioned something</b>	<b>77%</b>	<b>77%</b>	<b>77%</b>
Fear of ploy to hurt innocent people	17%	15%	19%
Fear of not knowing how to help	12%	7%	16%
People already there	8%	11%	7%
Ability to stop safely	8%	11%	5%
Fear of lawsuits	7%	9%	6%
Personal safety	6%	5%	6%
Bad location	5%	5%	4%
If I were rushed, late or in a hurry	4%	6%	3%
Seriousness of crash	3%	5%	2%
Fear of possibly causing further injury	3%	3%	3%
Depends on time of day, day or night	2%	1%	3%
Safety of family, children, other occupants	2%	1%	3%
I would call for help	2%	1%	2%
Don't want to see dead, mangled bodies	2%	1%	2%
Risk of flame, fire, explosion	1%	1%	1%
Extent of injuries	1%	1%	*
Fear of HIV/AIDS virus from blood	*	1%	*
Other	3%	3%	3%
<b>Don't know/refuse</b>	<b>10%</b>	<b>10%</b>	<b>9%</b>

\* Less than 0.5%.

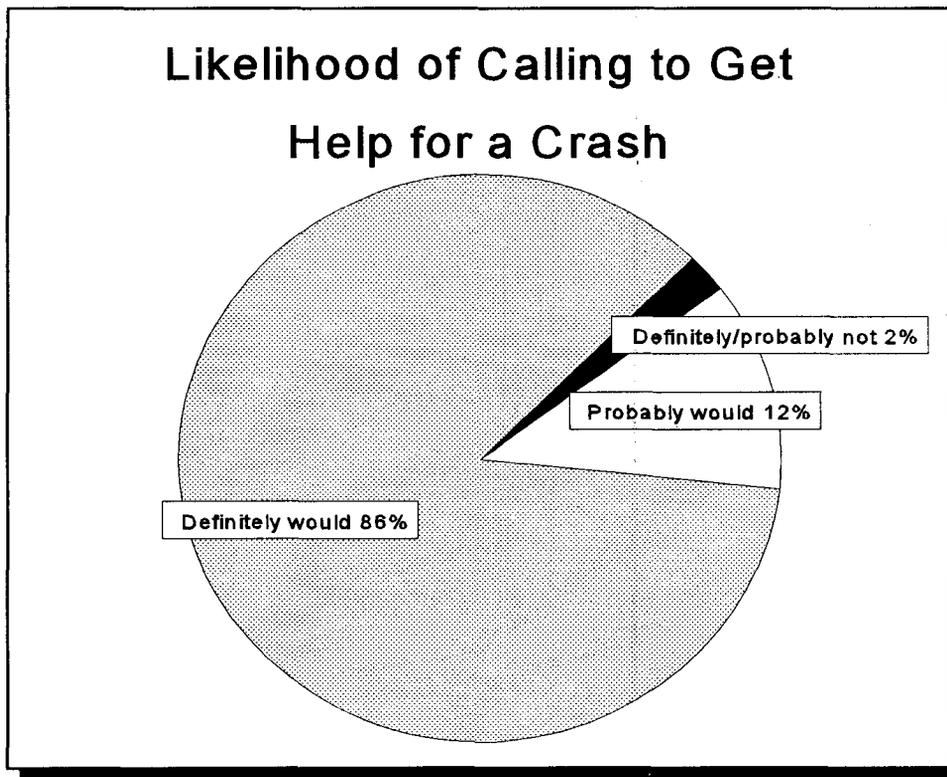
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Males, more than females, gave reasons for not stopping that had an external focus: people are already there (11% vs. 7%), ability to stop safely (11% vs. 5%), fear of lawsuits (9% vs. 6%), if rushed (6% vs. 3%), and depends on the seriousness of the crash (5% vs. 2%). Conversely, females, more than males, gave reasons related to personal safety: fear of it being a ploy to hurt innocent people (19% vs. 15%), fear of not knowing how to help (16% vs. 7%), depends on the time of day (3% vs 1%), and safety of other occupants (3% vs. 1%).

## TELEPHONING FOR HELP AT AN INJURY CRASH

Respondents also were asked how likely they would be to call for help in situations where it was too dangerous to stop and provide assistance. Virtually everyone (98%) said they would call at the nearest phone with 86% saying they definitely would call and 12% saying they probably would call (see Figure 12).

FIGURE 12



Qx: *Suppose you are driving, you see an accident and think that someone might be injured, but it is too dangerous to pull over and help at the scene. How likely would you be to call for help from the nearest available phone? (If no one else on scene.) Do you think that you ...?*

Base: *Total population age 16 and over.  
Unweighted N=4,022*

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Respondents who did not say they "definitely would call" were asked what, if anything, would prevent them from calling. The most common reasons given, mentioned by 25%, involved the availability of a phone (see Table 5). The second most commonly mentioned reasons (8%) were associated with safety issues, primarily that the next available phone may be in an unsafe area (5%), or it may be hazardous to stop (2%). Other miscellaneous reasons were given including people already there (9%), in a hurry (4%), or it depends on the kind of accident (3%).

TABLE 5

<b>Reasons for Not Making a Call</b>			
Qx: <i>What, if anything, would prevent you from telephoning for help?</i> [Multiple responses were accepted.]			
Base: <i>Did not say "definitely would call".</i>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
<i>Unweighted N</i>	535	279	254
<b>Telephone availability (net)</b>	<b>25%</b>	<b>28%</b>	<b>21%</b>
Availability, finding, access	22%	24%	19%
Don't have car or cellular phone	3%	2%	3%
Other availability	1%	3%	-
<b>Safety concerns (net)</b>	<b>8%</b>	<b>7%</b>	<b>10%</b>
Unsafe area	5%	3%	8%
Hazardous situation	2%	3%	1%
Other safety	1%	1%	2%
<b>Miscellaneous (net)</b>	<b>22%</b>	<b>22%</b>	<b>21%</b>
Assistance already there	9%	8%	10%
In a hurry	4%	5%	3%
Personal emergency	3%	3%	4%
Depends on the accident	3%	3%	3%
Traffic	2%	2%	1%
Other miscellaneous	2%	2%	1%

- None.

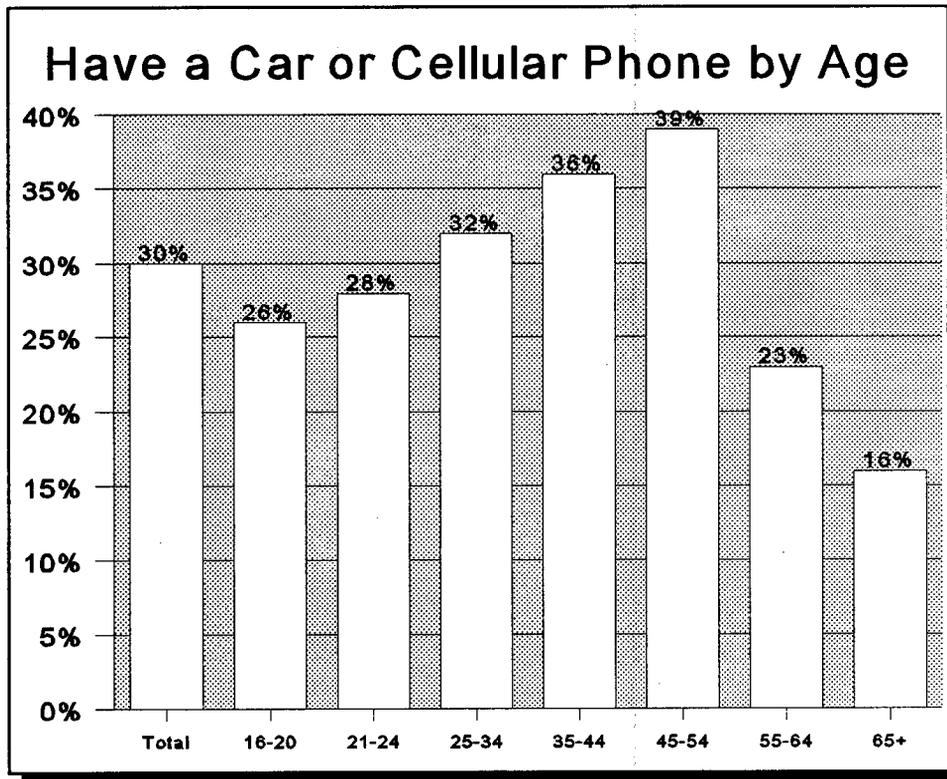
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As shown in Table 5, males were more likely than females to mention the availability of a phone (28% vs. 21%) but were less likely to mention safety concerns (7% vs. 10%). There were no other discernible differences.

### AVAILABILITY AND USE OF CELLULAR PHONES

The availability of car phones or cellular phones in vehicles makes it easier for individuals who come upon a crash to report it to the police or call for EMS assistance. Almost one person in three age 16 or over (30%) reported that they have a car phone or carry a cellular phone in their usual vehicle (see Figure 13).

FIGURE 13



Qx: Do you have a car phone or ever carry a cellular phone in the motor vehicle you usually drive?

Base: Total population age 16 and over.

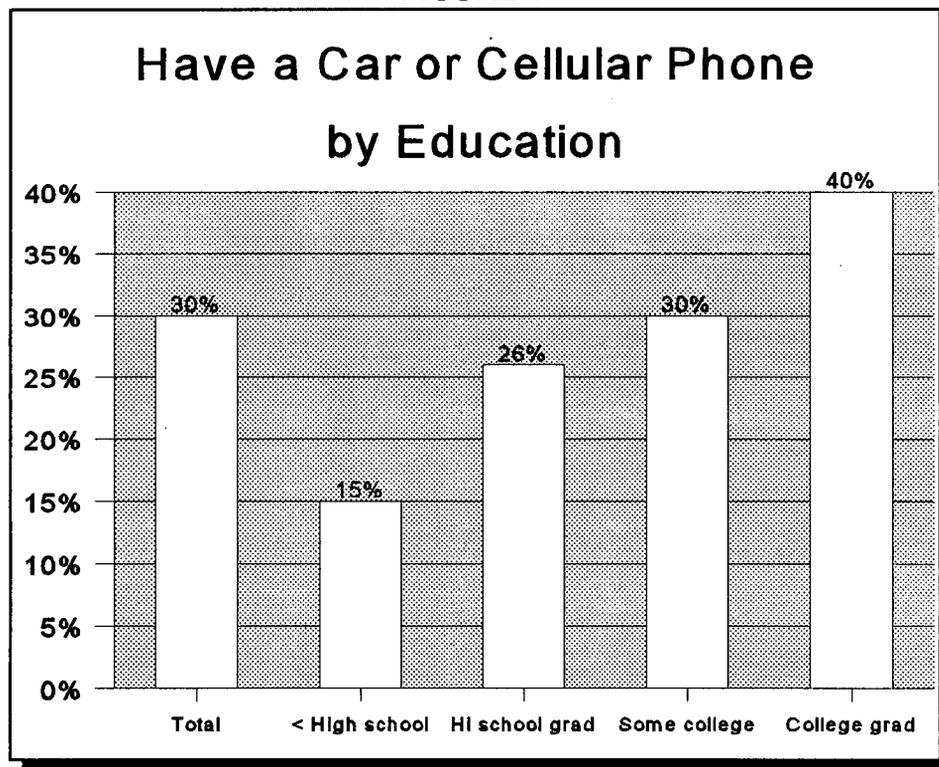
Unweighted N=4,022

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While there was little difference in the proportion of males (31%) and females (29%) who reported having these types of phones in their vehicles, availability varied by age. A phone was in the usual vehicle of about one fourth (26%) of those 16 to 20. This increased fairly steadily until it reached two in five (39%) of those ages 45 to 54. It fell to 23% of those ages 55 to 64 (lower than the rate for those 16 to 20) and 16% for those 65 and over.

The availability of a car or cellular phone was directly related to educational level. Fifteen percent of those with less than a high school education reported having a car phone, increasing to 26% of those who graduated from high school, to 30% of those with some college, and to 40% of those who have graduated college (see Figure 14).

FIGURE 14



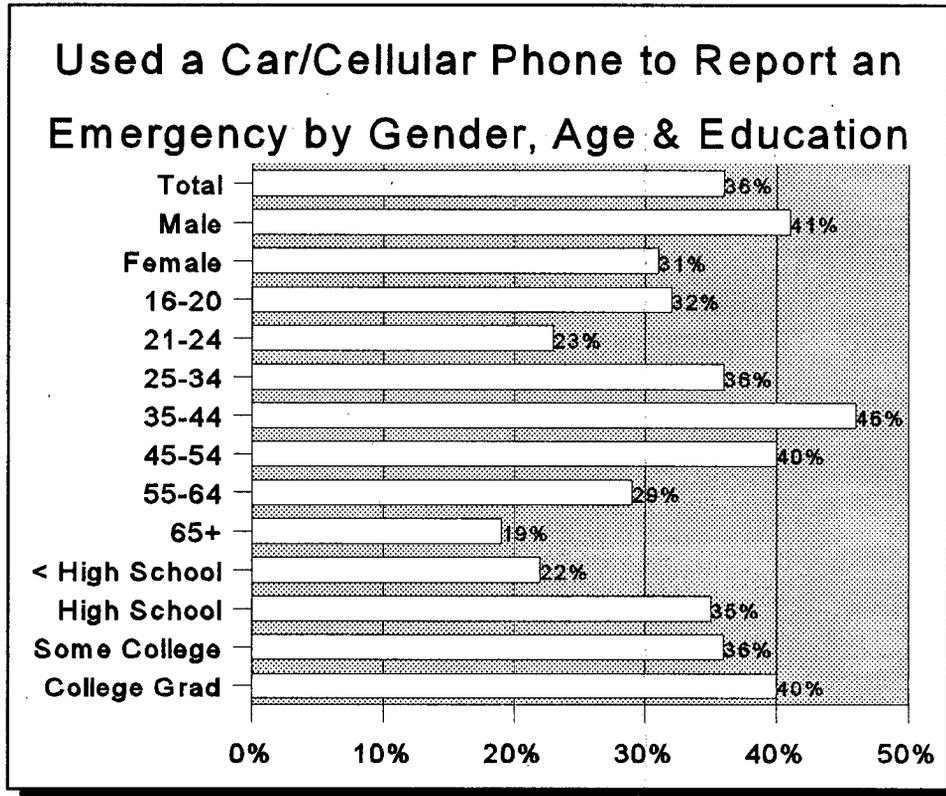
Qx: Do you have a car phone or ever carry a cellular phone in the motor vehicle you usually drive?

Base: Total population age 16 and over.

Unweighted N=4,022

Those who said they had a car or cellular phone were asked if they ever used their phone to make an emergency call (see Figure 15).

FIGURE 15



*Qx: Have you ever used a car phone or cellular phone to report an emergency while you were driving or riding in a motor vehicle?*

*Base: Have a car phone or carry a cellular phone in vehicle.*

*Unweighted N=1,321*

Slightly more than one-third (36%) of those who have car/cellular phones had made an emergency call while driving or riding as a passenger. Even though males and females had car/cellular phones available in approximately the same proportions, they reported an emergency from the road at different rates. About two males in five (41%) have reported an emergency from the road compared to about three in ten (31%) females. There was no clear pattern of reporting road emergencies by age. There was a trend, however, with regard to education. Calling about a road emergency increased with education. Twenty-two percent of those who had not graduated high school and who had a car/cellular phone

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had phoned in a road emergency. This increased to 35% and 36% for those who graduated high school or had some college, respectively, and to 40% for those who had graduated from college.

Those individuals who had used their phones to call in an emergency were asked the specific nature of the call. More than two-thirds (68%) of those who made a call did so to report a vehicle crash. The next most common emergencies reported, both mentioned by about one person in ten (9%), were out of control vehicles and disabled or stalled vehicles. Other emergency situations reported by car or cellular phone were mentioned by 6% or less (see Table 6).

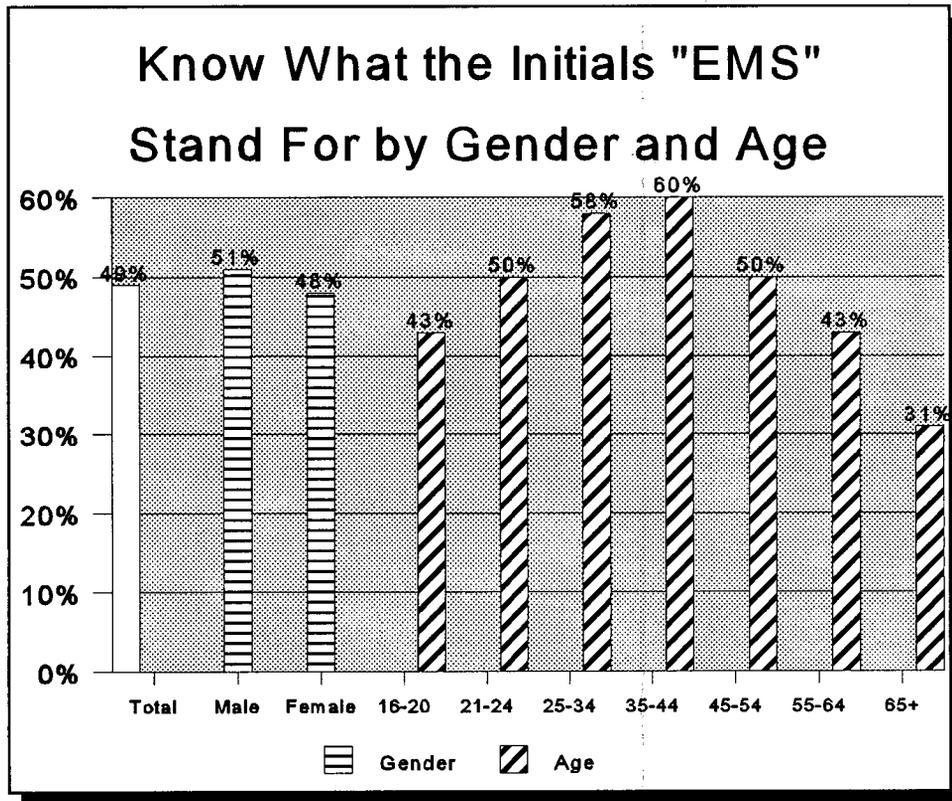
TABLE 6

<b>Kind of Emergency Reported</b>	
<i>Qx: What kind of emergency did you call about ?</i>	
<i>Base: Used a car phone or cellular phone in car to report an emergency.</i>	
<i>Unweighted N</i>	<i>503</i>
Car or automobile accident	68%
Out of control, weaving vehicle	9%
Disabled or stalled car or automobile	9%
DWI or suspected drunk driver	6%
Car or automobile fire	4%
Person laying in the street	3%
Person became ill or sick	2%
Hit and Run	2%
Other	8%
Don't know	1%

**KNOWLEDGE OF INITIALS "EMS"**

About half (49%) of the population age 16 and older know that the initials "EMS" stand for "emergency medical services/systems" (see Figure 16). Males (51%) were slightly more aware of the meaning of "EMS" than were females (48%). Knowledge of the meaning of these initials shows an "arch-shaped" relationship, with "EMS" being recognized by 43% of the 16 to 20 age group, increasing to 50% for the 21-24 group, 58% for the 25-34 group, and peaking at 60% for the 35-44 group before declining to 50% for the 45 to 54 group, 43% for the 55 to 64 group and bottoming out at 31% for those 65 and over.

FIGURE 16

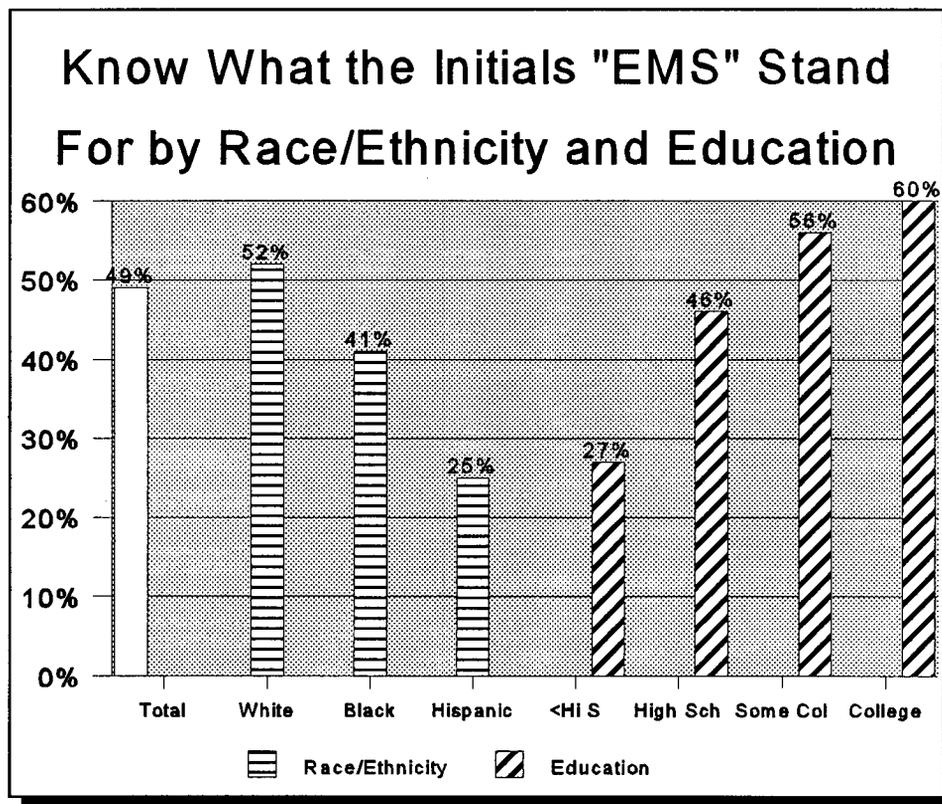


Qx: Can you tell me what the initials "EMS" stand for?  
 Base: Total population age 16 and over.  
 Unweighted N=4,022

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Slightly over half (52%) of White respondents knew what "EMS" stands for compared to about two out of five (41%) Blacks and one-fourth (25%) of Hispanics (see Figure 17). Knowing the meaning of "EMS" increases with education. Slightly over one in four (27%) of those who had not graduated high school knew the meaning of the term compared to almost half (46%) of high school graduates, over half (56%) of those with some college, and three out of five (60%) of those who had graduated college.

FIGURE 17



QX: Can you tell me what the initials "EMS" stand for?  
 Base: Total population age 16 and over.  
 Unweighted N=4,022

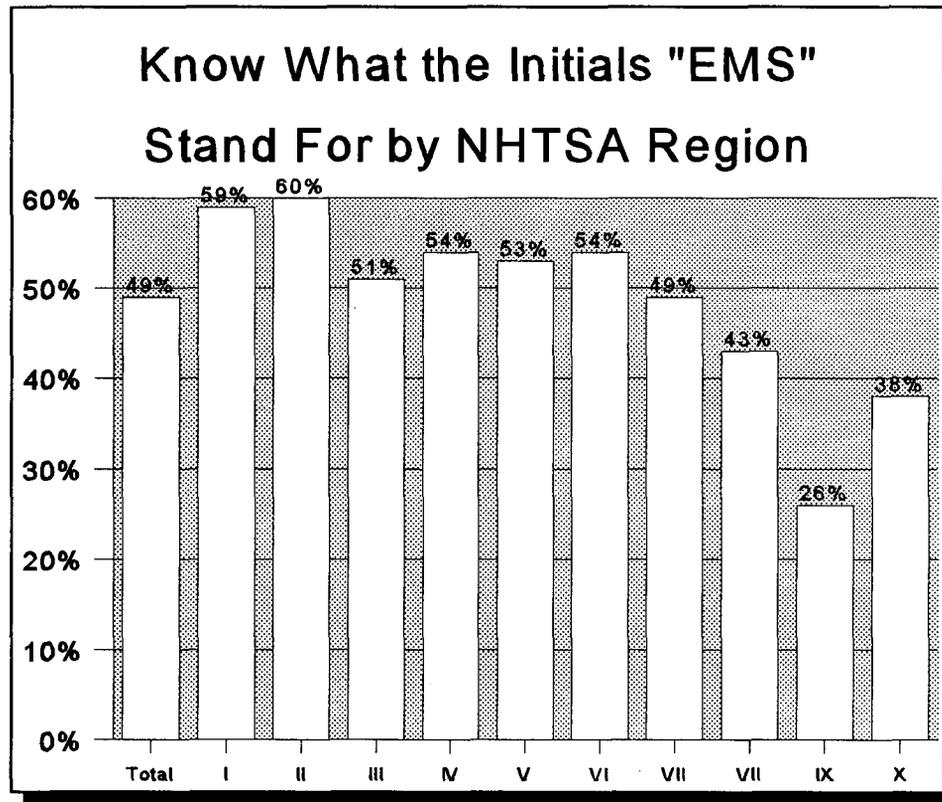
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One of the more interesting findings concerning public knowledge of the initials "EMS" comes from an analysis by NHTSA region (Figure 18 next page). NHTSA segments the states into ten regions for purposes of programmatic outreach (see list of regions below). The data show greater awareness of the meaning of "EMS" in the eastern part of the country compared to the west. In the five NHTSA regions located primarily in the east (Regions I-V), 55% knew that "EMS" stood for emergency medical services. In Regions VI through X 41% knew its meaning.

### National Highway Traffic Safety Administration Regions

Region	States
I	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
II	New York, New Jersey
III	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
IV	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
V	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
VI	Arkansas, Louisiana, New Mexico, Oklahoma, Texas
VII	Iowa, Kansas, Missouri, Nebraska
VIII	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
IX	Arizona, California, Hawaii, Nevada
X	Alaska, Idaho, Oregon, Washington

FIGURE 18

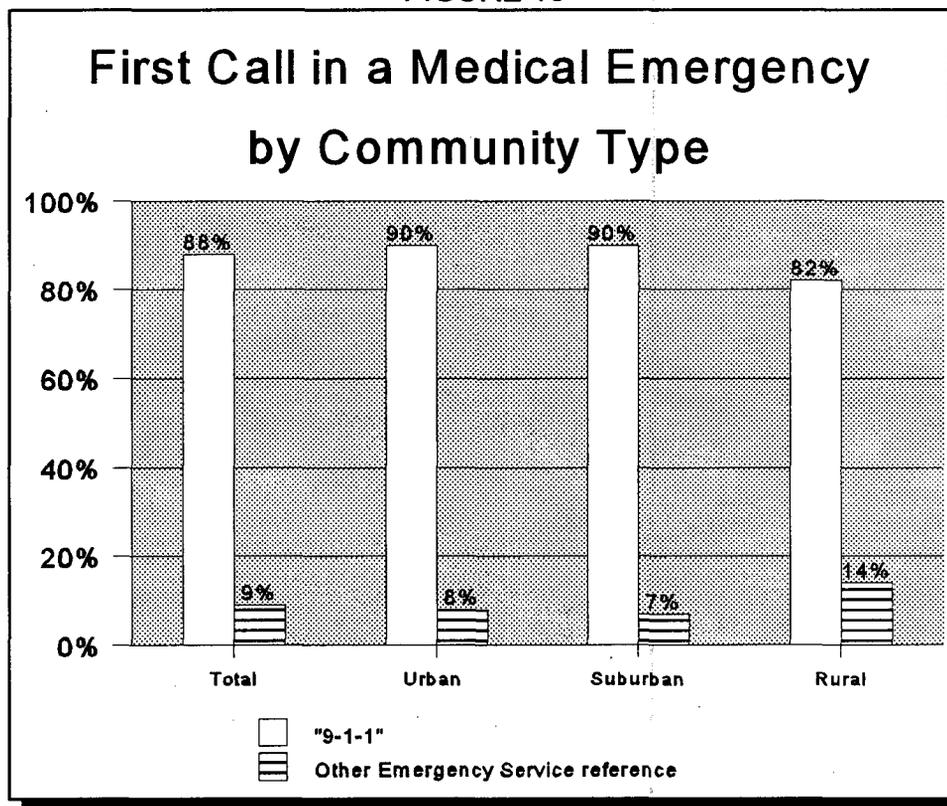


QX: Can you tell me what the initials "EMS" stand for?  
Base: Total population age 16 and over.  
Unweighted N=4,022

## TELEPHONING FOR HELP IN A MEDICAL EMERGENCY

The survey asked respondents who they would call first in the event of a medical emergency. Almost nine out of ten (88%) said "9-1-1" (see Figure 19). An additional 9% mentioned some other emergency response group — emergency medical services (4%), police (2%), ambulance service (2%), fire department (1%), and rescue squad (<.5%).

FIGURE 19



Qx: *If someone was experiencing a medical emergency and you needed to get help for that person, who would you call first?*

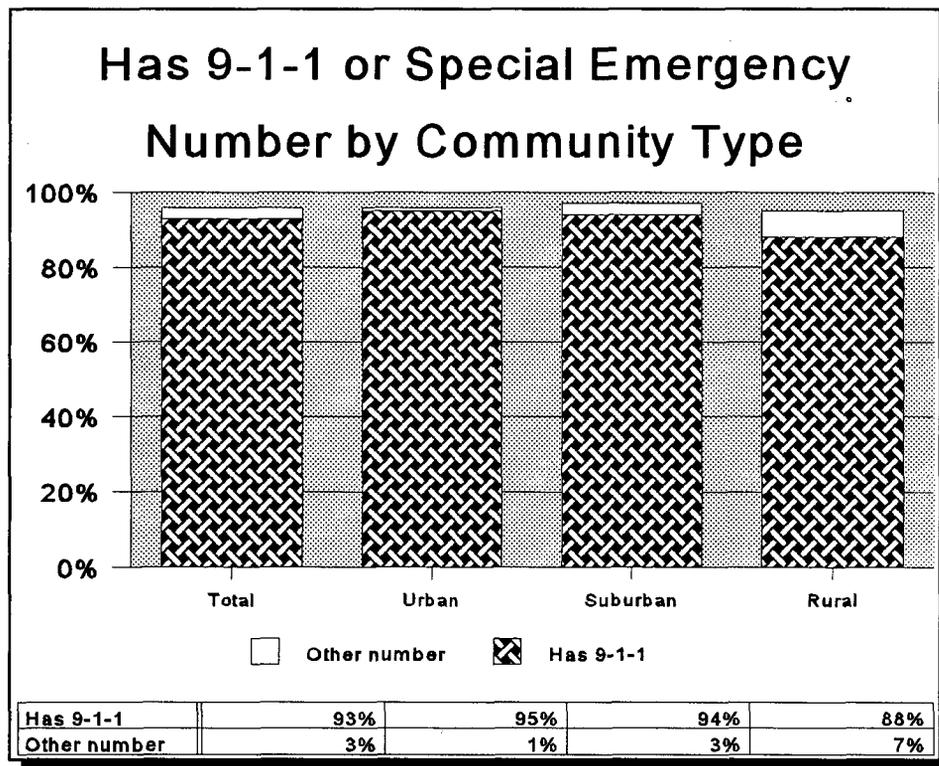
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

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Respondents who did not say they would call 9-1-1 first were asked if there was a specific number to call for medical emergencies in their community, and, if so, what was the number? An additional 5% of the total population acknowledged having 9-1-1, while another 3.5% gave some other number. Combined with the 88% who said they would call 9-1-1 first, this meant that 93% of the public reported having 9-1-1. The percentage ranged from 88% in rural areas to 95% in urban areas. Including all emergency numbers, 97% of the public reported having a specific telephone number to call for medical emergencies (see Figure 20)

FIGURE 20



Qx: *If someone was experiencing a medical emergency and you needed to get help for that person, who would you call first?*

Qx: *Is there a particular telephone number to call for medical emergencies in your community?*

Qx: *What is that telephone number?*

Base: *Total population age 16 and over.*

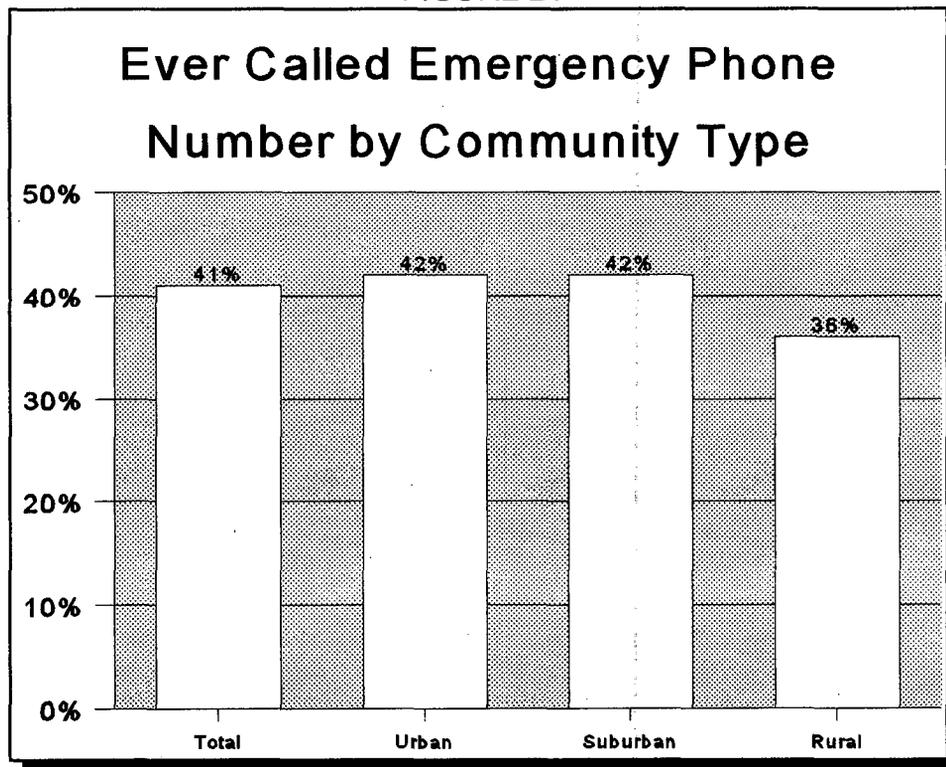
*Unweighted N=4,022*

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Everyone was asked whether they had ever called an emergency number for help. Two out of five (41%) persons age 16 or older have called 9-1-1 or some other emergency number for help at some time in the past (Figure 21). Unlike the earlier findings on cell phone reporting, the percentage using an emergency number was somewhat higher for females (44%) than for males (37%).

About two in five (42%) residents of urban or suburban communities had called an emergency number for help. In contrast, 36% of residents in rural communities had called emergency services.

FIGURE 21



*Qx: Have you personally ever called 9-1-1 or another emergency number for help?*

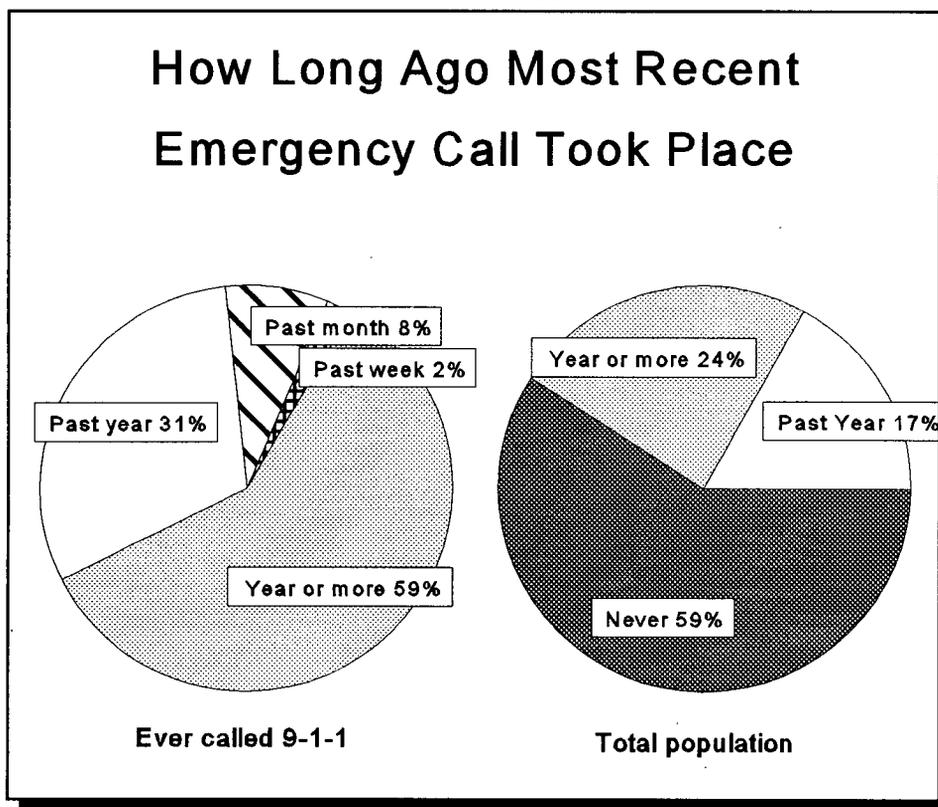
*Base: Total population age 16 and over.*

*Unweighted N=4,022*

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Those individuals who had ever called "9-1-1" or another emergency response number were asked how long ago the most recent call occurred. Two calls in five (41%) took place within the last year (see Figure 22). This includes calls which took place in the last week (2%), the last month (8%), or within the last year (31%). Three calls in five (59%) were made more than one year ago. Overall, 17% of the total population age 16 and older made an emergency call in the past year (past week, month or year).

**FIGURE 22**



*Qx: How long ago did that occur (the last time)?*

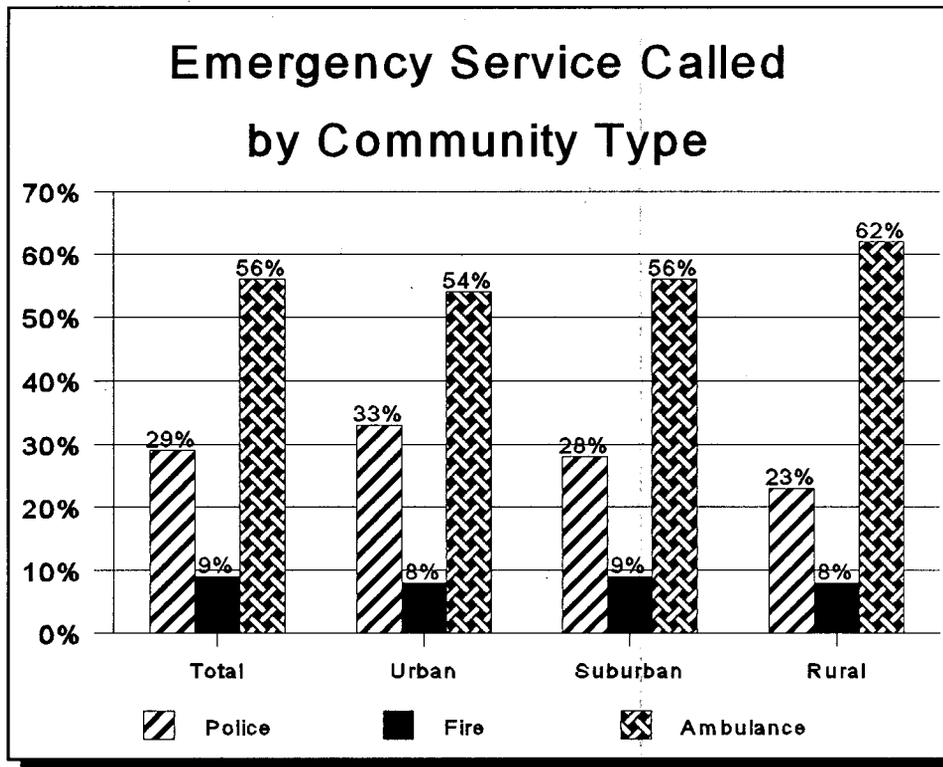
*Base: Have ever called 9-1-1 or other emergency number, and total population.*

*Unweighted N(Ever called)=1,643; N(Total population)=4,022*

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Those who made emergency calls were also asked who they called on the most recent occasion. The majority (56%) had called for an ambulance (see Figure 23). Three in ten (29%) called the police and one in ten (9%) called the fire department. The remainder either called some other service (6%) or didn't recall (1%).

FIGURE 23



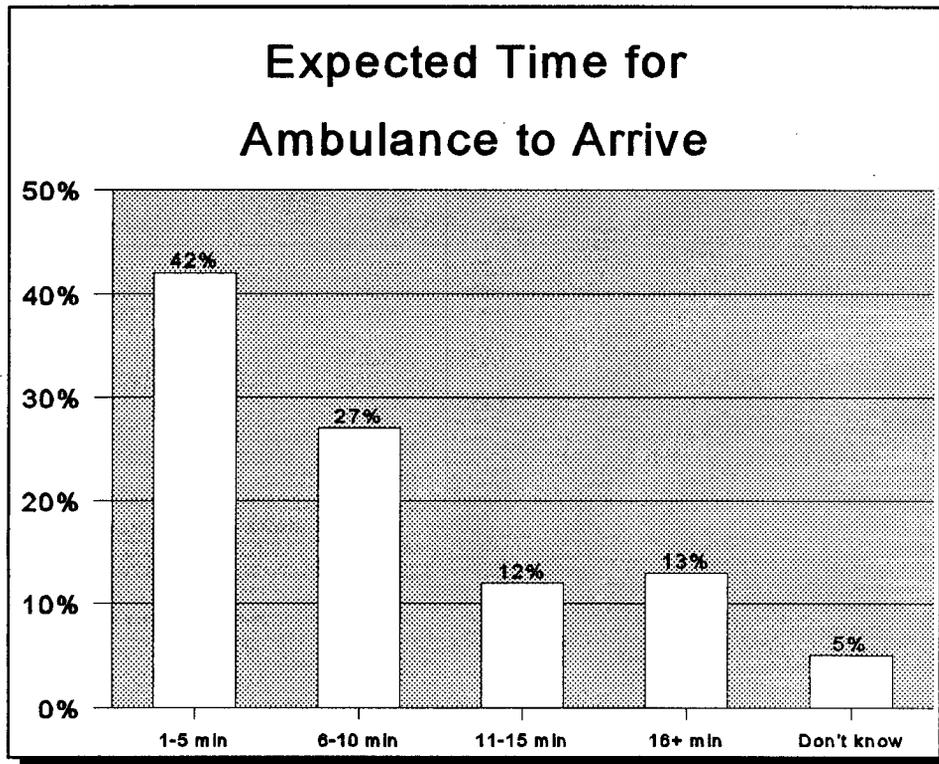
Qx: Did you call for police, fire, an ambulance or something else?  
Base: Have called 9-1-1 or other emergency number.  
Unweighted N=1,643

The proportion calling the fire department is fairly consistent across community types. However, the proportion placing an emergency call to the police was highest in urban communities (33%), declined slightly in suburban communities (28%), and was lowest in rural communities (23%). Conversely, calling for an ambulance was lowest in the urban areas (54%), slightly higher in the suburbs (56%), and highest in rural areas (62%).

## EXPECTATIONS FOR EMERGENCY RESPONSE

When asked their expectations regarding ambulance response time, people generally thought it would take only a few minutes for an ambulance to arrive. Two in five (42%) said they expected an ambulance to arrive within five minutes of being called, about seven in ten (69%) expected an ambulance to arrive within 10 minutes, and four in five (81%) expected it to arrive within 15 minutes (see Figure 24).

FIGURE 24



Qx: *If there was a medical emergency in your neighborhood and you called an ambulance, how long do you think it would take for the ambulance to arrive?*

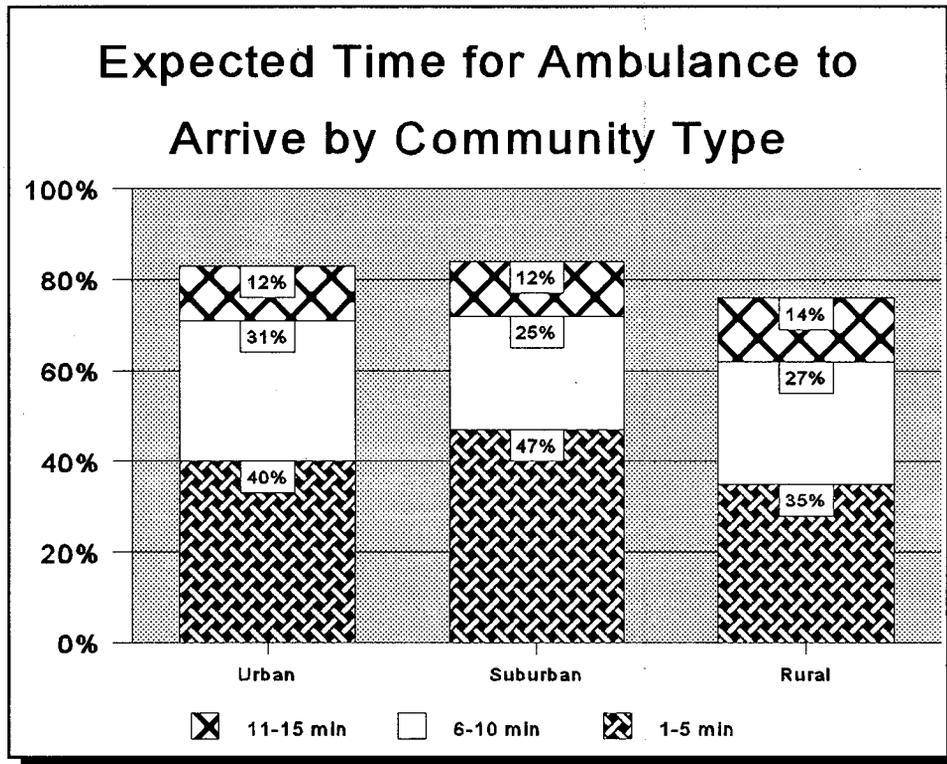
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

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Expectations vary widely by community type (see Figure 25). Almost half (47%) of residents in suburban communities expected the ambulance to arrive within 5 minutes of being called and 72% expected it to arrive within 10 minutes. People who live in urban areas had slightly lower expectations for a five minute arrival (40%) though similar expectations for a 10 minute arrival (70%). Rural residents had the lowest expectation with 35% expecting a five minute arrival and 62% expecting a 10 minute arrival. In addition, 20% of rural residents expected the ambulance to take more than 15 minutes to arrive.

FIGURE 25



Qx: *If there was a medical emergency in your neighborhood and you called an ambulance, how long do you think it would take for the ambulance to arrive?*

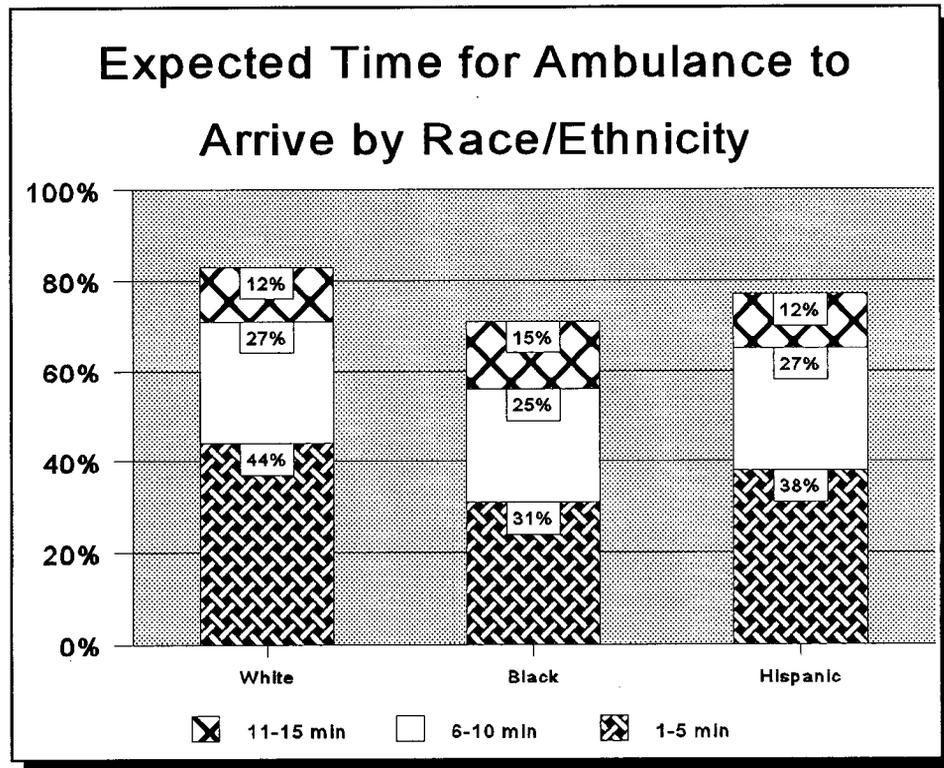
Base: Total population age 16 and over.

Unweighted N=4,022

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Expectations for ambulance response time also vary considerably by race and ethnicity (see Figure 26). Over two out of five (44%) Whites expected the ambulance to arrive within five minutes of being called and 71% expected it to arrive within 10 minutes. A little less than two out of five (38%) Hispanics expected the ambulance to arrive within five minutes and about two out of three (66%) expecting it to arrive within 10 minutes. Blacks had the lowest expectation with only 31% expecting arrival within five minutes and 56% within 10 minutes. About one in five Blacks and Hispanics (20% and 18% respectively) expected arrival to take more than 15 minutes.

FIGURE 26



Qx: *If there was a medical emergency in your neighborhood and you called an ambulance, how long do you think it would take for the ambulance to arrive?*

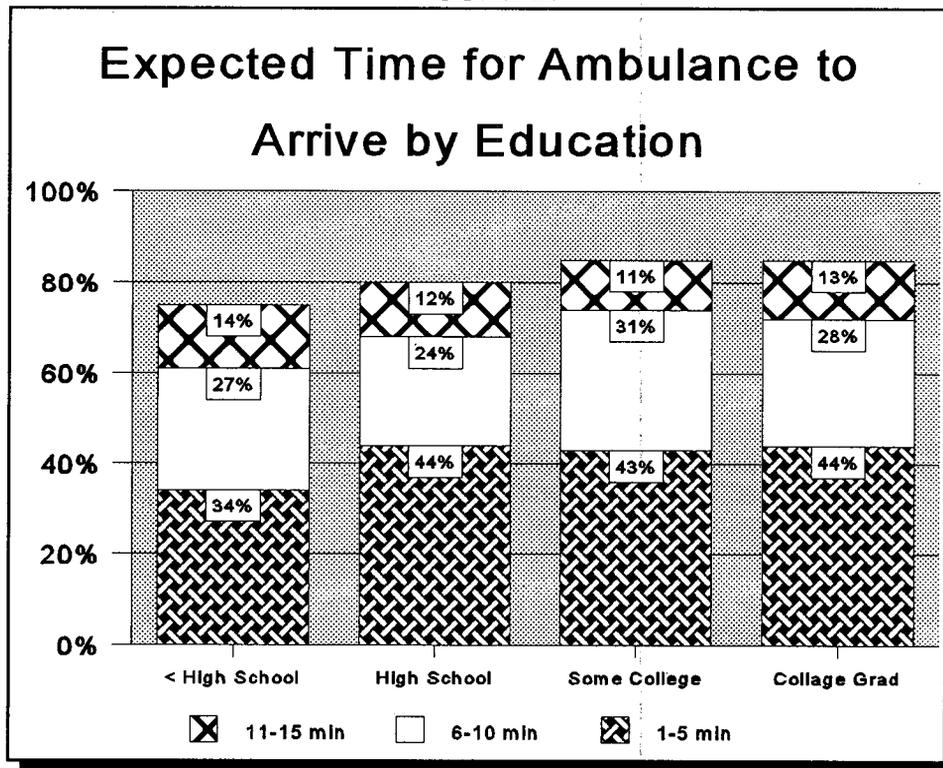
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

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Expectations about ambulance response time tended to increase with education (see Figure 27). Those with less than a high school degree had the lowest expectations of an ambulance to arrive within five minutes (34%), while the other three groups had expectations in the 43%-44% range. The proportions expecting the ambulance to arrive within 10 minutes increased from 62% for those with less than a high school education, to 67% for high school graduates, to 74% for those with some college, before declining to 71% for college graduates.

FIGURE 27



Qx: *If there was a medical emergency in your neighborhood and you called an ambulance, how long do you think it would take for the ambulance to arrive?*

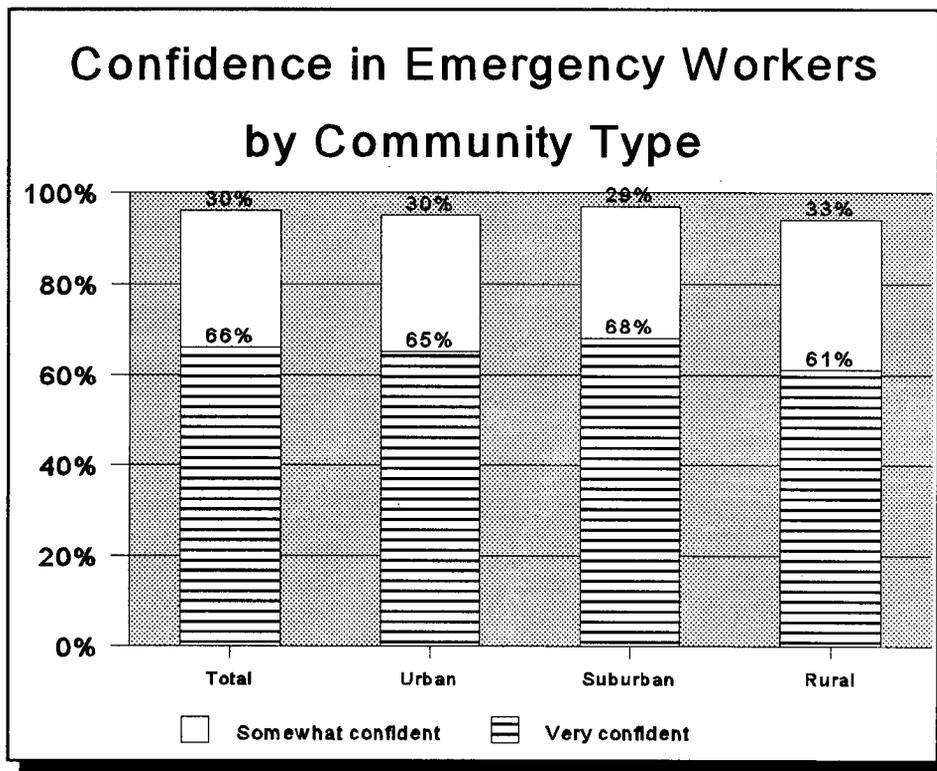
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

## CONFIDENCE IN EMERGENCY WORKERS

Two thirds (66%) of the driving age public were “very confident” that ambulance or other emergency workers would know what to do and an additional 30% were “somewhat confident” (see Figure 28). Confidence in emergency workers was highest in suburban communities and lowest in rural areas.

FIGURE 28



QX: *Regardless of the type of medical emergency, how confident are you that the ambulance or other emergency workers would know what to do?*

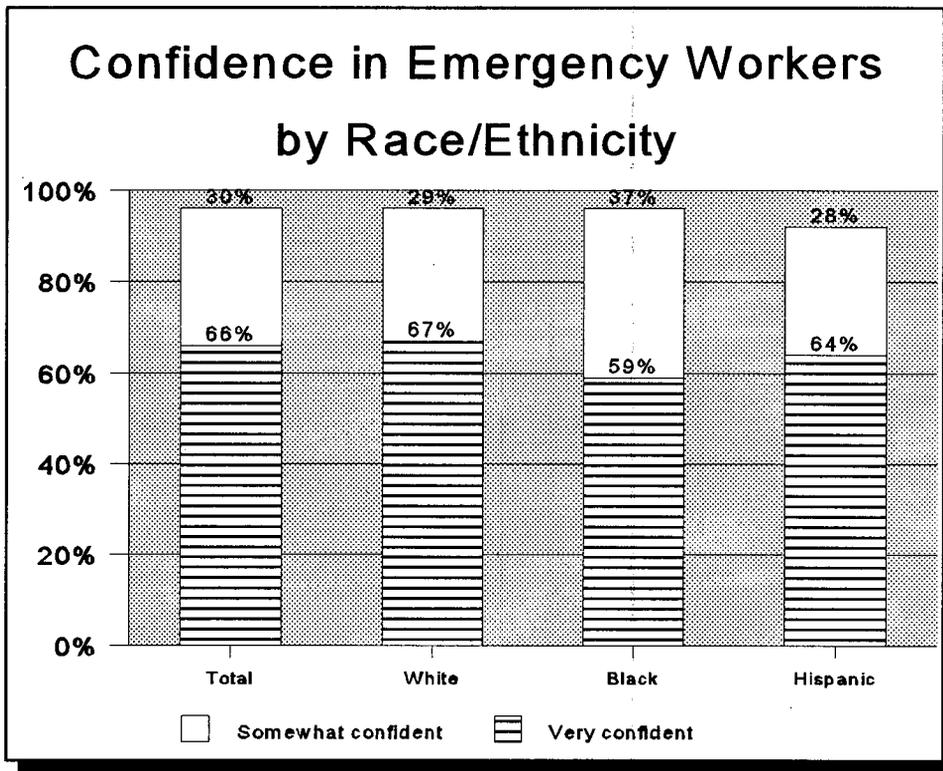
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

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There are racial and ethnic differences in public confidence in emergency workers (see Figure 29). Two thirds (67%) of Whites were "very confident" that emergency workers would know what to do. Slightly fewer Hispanics (64%) gave the same rating and even fewer Blacks (59%) were similarly confident. However, when the "somewhat confident" ratings are added, Whites and Blacks had equal confidence ratings of emergency workers.

FIGURE 29



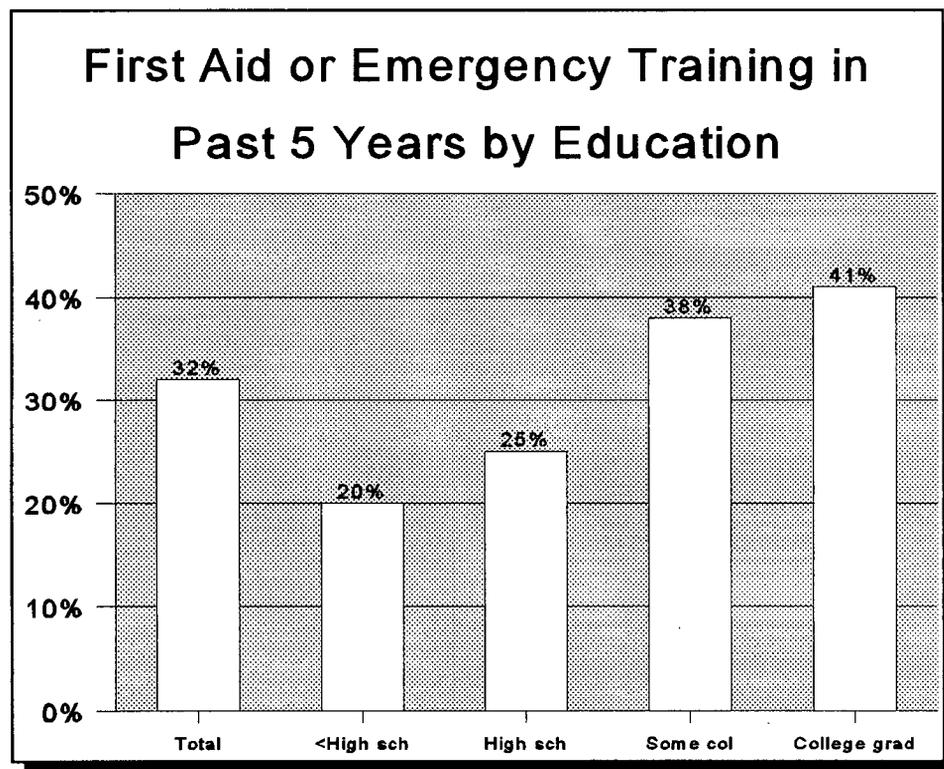
Qx: *Regardless of the type of medical emergency, how confident are you that the ambulance or other emergency workers would know what to do?*

Base: *Total population age 16 and over.*  
*Unweighted N=4,022*

## INTEREST IN TRAINING TO ASSIST CRASH VICTIMS

About one in three (32%) persons of driving age had taken some kind of an emergency or first aid course in the last five years (see Figure 30). The proportion increased dramatically with education, with college graduates twice as likely to have had training of this type than those with less than a high school education (41% vs. 20%). The difference between high school graduates and those who had some college was almost as dramatic — 25% vs. 38%.

FIGURE 30



Qx: *In the past 5 years, have you taken any kind of emergency or first aid training?*

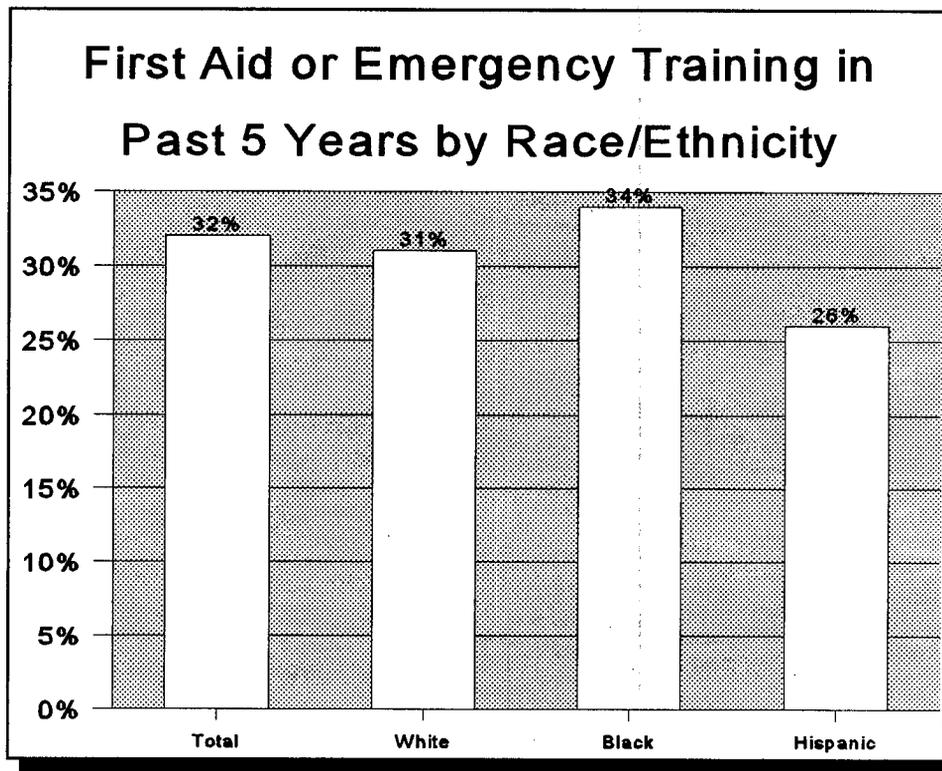
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

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Three in ten (31%) Whites had taken an emergency or first aid course in the last five years (see Figure 31). The proportion was slightly higher for Blacks where one-third (34%) had taken a course of this type. However, the proportion was noticeably lower for Hispanics where one in four (26%) had taken some sort of emergency care course in the last five years.

FIGURE 31



Qx: *In the past 5 years, have you taken any kind of emergency or first aid training?*

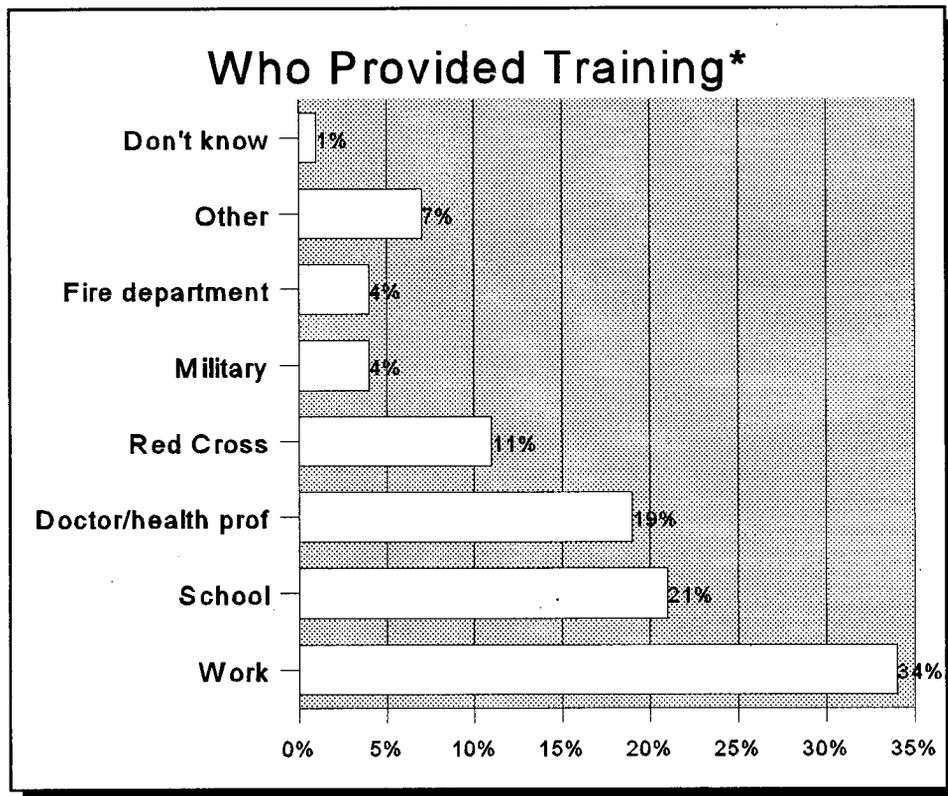
Base: *Total population age 16 and over.*

*Unweighted N=4,022*

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Those who had taken first aid or emergency training in the past five years were asked who provided the course (see Figure 32). About one third (34%) received training through work. One in five (21%) received their training through school (for those under 21 the proportion who received training through school was 62%). An additional 19% were trained by a doctor or other health professional and 11% were trained by the Red Cross.

FIGURE 32



Qx: *Who provided the training?*

Base: *Have taken first aid or emergency train in past 5 years.*  
[Multiple responses were accepted.]

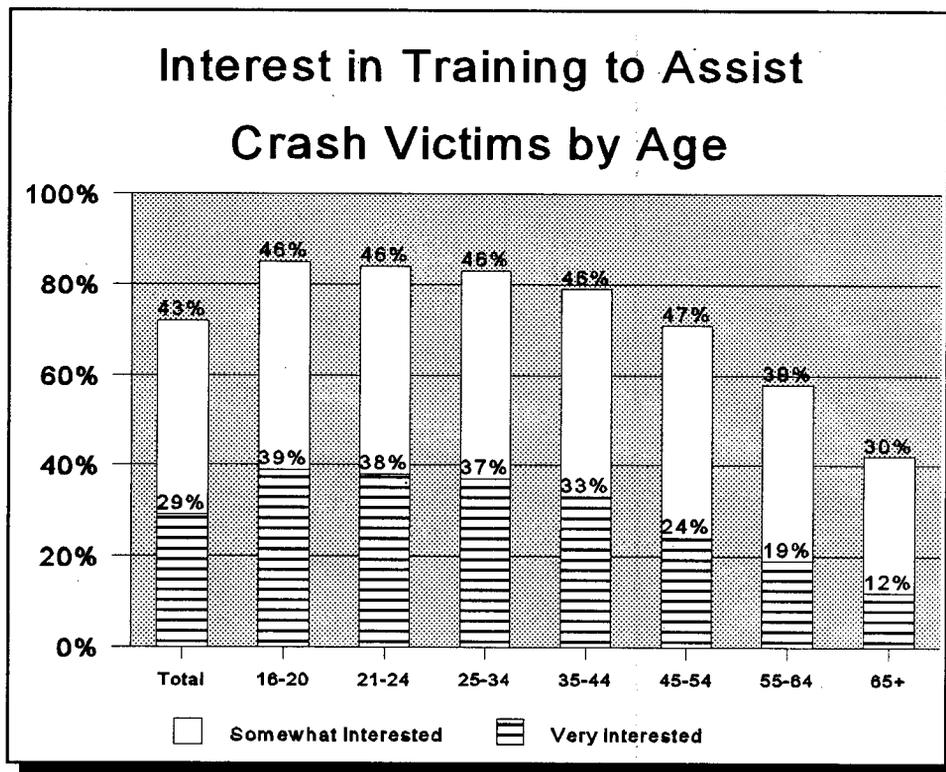
Unweighted N=1,377

\* Total Exceeds 100% since multiple responses were accepted.

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Respondents were asked how interested they would be in taking a course that would give them training to assist crash victims (see Figure 33), assuming it was low cost and convenient. Almost three in four (72%) said they would be very interested (29%) or somewhat interested (43%). Interest in such a course was inversely related to age, that is, as people got older, interest declined. More than five out of six in the 16 to 20 age group (86%) and the 21 to 24 age group (85%) said they would be interested. From this point interest declined to 83% for those in the 25 to 34 group, 79% in the 35 to 44 group, 71% in the 45 to 54 group, 58% in the 55 to 64 group, and finally to 42% for those over 65.

FIGURE 33



Qx: Assuming it was at low cost and in a convenient location, how interested would you be in taking training on how to assist injured persons in vehicle crashes?

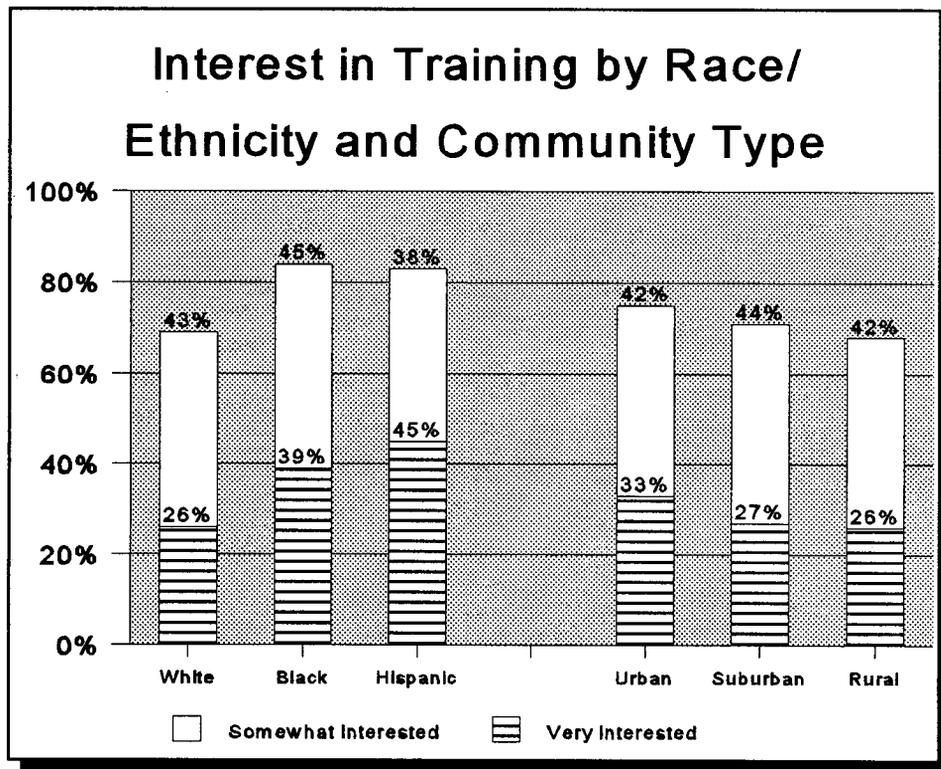
Base: Total population age 16 and over.

Unweighted N=4,022

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There was more interest in training of this type among minorities than among Whites (see Figure 34). Only 69% of Whites were "very interested" (26%) or "somewhat interested" (43%) in training to assist crash victims. Interest among Blacks (84%) and Hispanics (83%) was considerably higher. It should be noted that this difference stemmed from high interest ("very interested") in such training. Two in five (39%) Blacks and close to half (45%) of Hispanics were very interested in such training.

FIGURE 34



Qx: Assuming it was at low cost and in a convenient location, how interested would you be in taking training on how to assist injured persons in vehicle crashes?

Base: Total population age 16 and over.

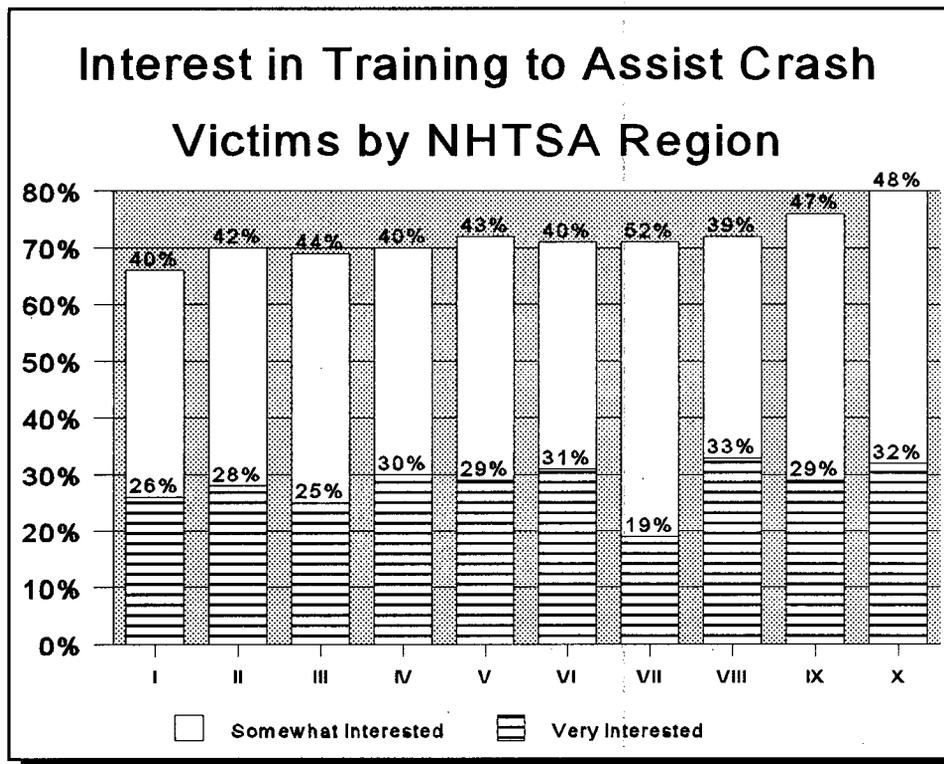
Unweighted N=4,022

Interest in training was highest in urban areas with three in four (75%) urban residents either very interested (33%) or somewhat interested (42%). Interest dropped to 71% among suburban residents and 68% for residents of rural communities.

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Interest in this type of training was lowest in NHTSA Region I (New England) where two in three (66%) expressed interest (see Figure 35). Interest was in the 69% to 72% range for Regions II through VIII. Interest in the remaining two regions was higher: three in four (76%) in Region IX (Arizona, California, Hawaii and Nevada) and four in five (79%) in Region X (Alaska, Idaho, Oregon and Washington). While overall interest in training was comparable to that seen in other regions, only one resident in five (19%) in Region VII (Iowa, Kansas, Missouri and Nebraska) was "very interested" in the training.

FIGURE 35



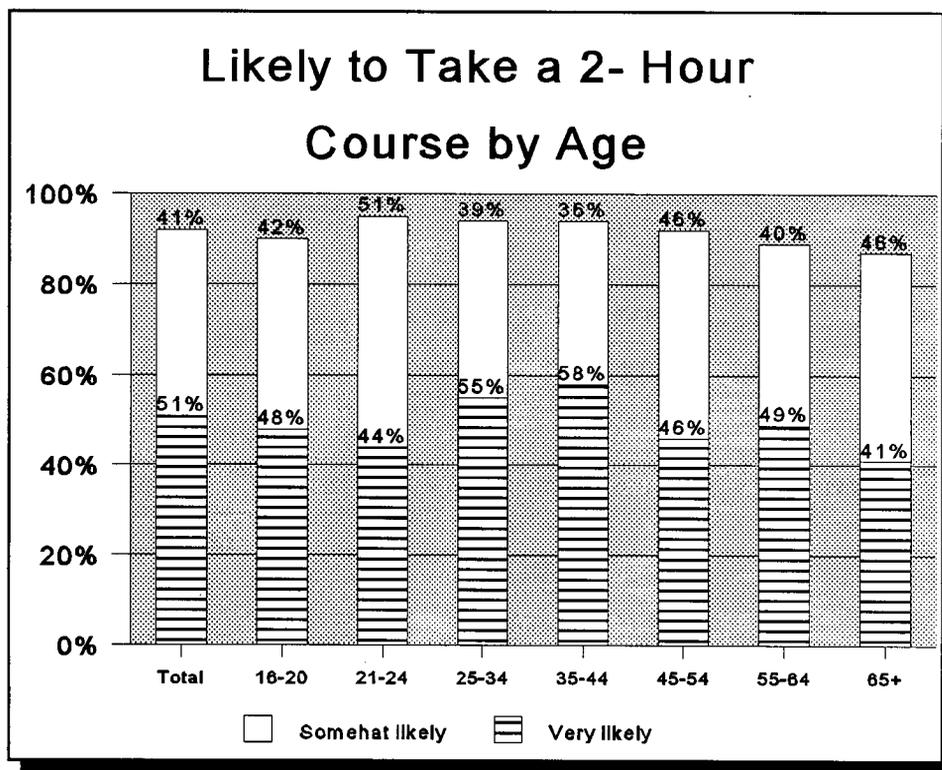
Qx: Assuming it was at low cost and in a convenient location, how interested would you be in taking training on how to assist injured persons in vehicle crashes?

Base: Total population age 16 and over.  
Unweighted N=4,022

1996 Motor Vehicle Occupant Safety Survey:  
Crash Injury & Emergency Medical Services

Individuals who expressed an interest in training to assist crash victims were given a specific scenario for a course — one 2-hour session — and asked how likely they would be to take such a course (see Figure 36). Overall, 92% of those who said they were interested in a course said they were either “very likely” (51%) or “somewhat likely” (41%) to take this specific course. Only 7% said they were unlikely.

FIGURE 36



**Qx:** If the training took no more than 2 hours in a single class session, how likely would you be to take such a class?

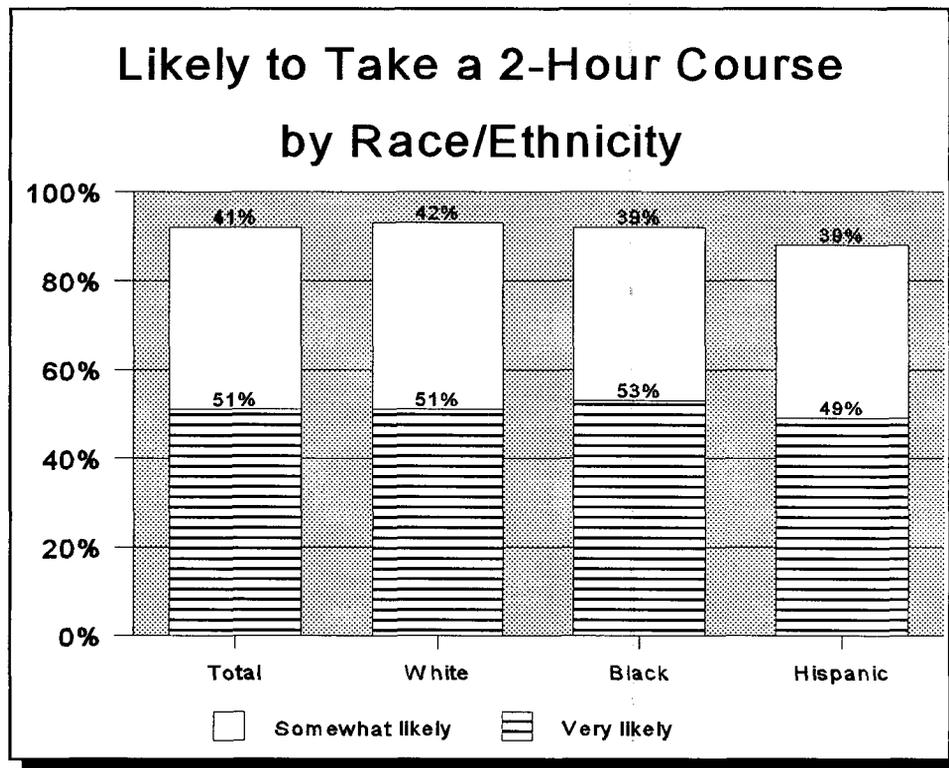
**Base:** Interested in taking a course in assisting injured persons in vehicle crashes, or said “it depends”.

Unweighted N=2,971

1996 Motor Vehicle Occupant Safety Survey:  
Crash Injury & Emergency Medical Services

Whites and Blacks who expressed general interest in taking a training course voiced a high likelihood of taking the two hour training — 93% and 92% respectively (see Figure 37). Interest was slightly lower among Hispanics (88%).

FIGURE 37



Qx: *If the training took no more than 2 hours in a single class session, how likely would you be to take such a class?*

Base: *Interested in taking a course in assisting injured persons in vehicle crashes, or said "it depends".*

Unweighted N=2,971

## CONCLUSIONS

Some of the notable findings from the Emergency Medical Services and crash injury components of the 1996 Motor Vehicle Occupant Safety Survey include:

- Almost one person in four (23%) age 16 and over reported that they had been injured in a vehicle crash at some time in the past where they required medical attention, including an estimated 1.2% of the total population who were injured in the past year.
- Of those who were ever injured in a vehicle crash, 61% (14% of the total population) had received injuries severe enough to prevent them from performing normal activities (work, school, household) for at least a week.
- Persons who were injured in a vehicle crash were about 50% more likely to be hospitalized from the crash-related injuries if they were not wearing a seat belt at the time of the crash.
- Males were more likely than females to state that they had no concerns and would stop to help victims at a crash site (58% to 47%). Females were more likely to express concerns about not knowing what to do (20% to 11%) and about personal safety (17% to 13%).
- Whites were less likely to have no concerns about stopping to help at a vehicle crash (50%) than were Blacks (60%) and Hispanics (64%). Further, Whites showed more concern than either Blacks or Hispanics in the areas of the ability to provide assistance (17% versus 11% and 15% respectively), personal safety (16% versus 12% and 9%), and potential liability for improper assistance (14% versus 4% and 5%).
- More than five in six persons (86%) reported that they definitely would make a telephone call to get help for a crash victim if it was too dangerous for them to stop and help.
- Nearly one in three persons (30%) said they have a car phone or carry a cellular phone in their usual vehicle; and slightly more than one-third of these (36%) have used their phone to report an emergency.
- About half (49%) the population knew what the initials "EMS" stand for with recognition highest in NHTSA Region I (59%) and Region II (60%), and lowest in Region IX (26%) and Region X (38%).
- Almost nine in ten (88%) reported that they would call "9-1-1" first in the event of a medical emergency; an additional 9% said they would call the police, the ambulance service, or some other emergency group.

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- Two in five (41%) persons age 16 and older have called 9-1-1 or some other emergency number some time in the past.
- Rural residents were less likely to have ever called an emergency number (36%) than residents of urban or suburban communities (42% for both).
- Among those making a call, urban residents were more likely to have called the police than were residents of either suburban or rural areas (33% versus 28% and 23% respectively) and less likely to have called for an ambulance (54% versus 56% and 62%).
- Two in five (42%) persons age 16 and older said they expected an ambulance to arrive within five minutes after being called and about seven in ten (69%) expected arrival within 10 minutes.
- Virtually everyone was very confident (66%) or somewhat confident (30%) in the abilities of their emergency response personnel to know what to do.
- One in three (32%) persons age 16 and older had taken first aid or emergency training in the last 5 years.
- Over seven in ten (72%) expressed interest in taking training on how to assist injured persons in vehicle crashes.
- Interest in taking training to assist injured persons was higher among Blacks (84%) and Hispanics (83%) than among Whites (69%).

1996 Motor Vehicle Occupant Safety Survey  
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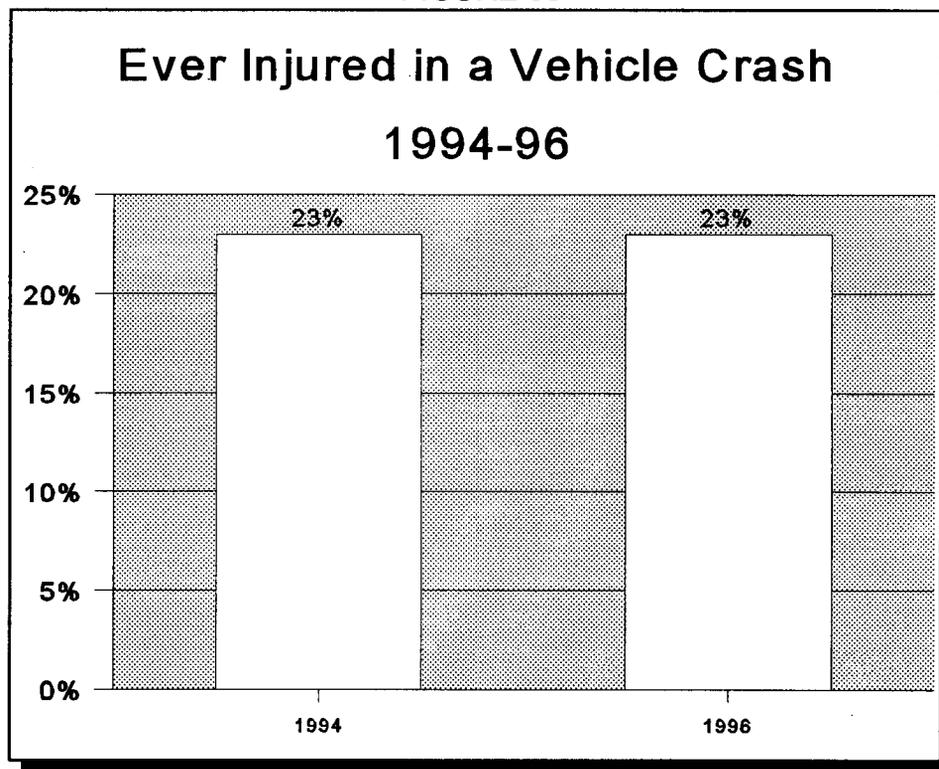
## **SECTION 2**

**TRENDS, 1994-96**

## VEHICLE CRASH INJURIES, 1994-96

The lifetime occurrence of ever having been injured in a vehicle crash to the extent that medical treatment was needed is unchanged from the 1994 study. In both the 1994 and the current study 23% of the population age 16 and over reported having needed medical treatment as a result of a vehicle crash.

FIGURE 38



Qx: *Have you ever been injured in a motor vehicle accident? Only count injuries that required medical attention.*

Base: *1994 - Total population; 1996 - Total population.*

*Unweighted N(1994)=4,018; N(1996)=8,210*

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Crash Injury & Emergency Medical Services

As was shown in Figure 37, the percentage of the population ever injured in crashes remained unchanged from the 1994 survey, 23% in both studies (see Table 7). In addition, the proportion of the population who had experienced injuries that prevented the performance of normal activities (work, school, or household) for at least a week was also unchanged from the previous study (14% in both 1994 and 1996). The proportion of the population who still had lingering effects one year after a crash increased slightly from the previous study (3% in 1994 to 4% in 1996).

TABLE 7

**Level of Disability Resulting from a Vehicle Crash,  
1994-96**

Qx: *Have you ever been injured in a motor vehicle accident? Only count injuries that required medical attention.*

Qx: *Did your injuries from that accident prevent you from performing any of your normal activities (work, school, household) for at least a week?*

Qx: *Were there any activities that you were unable to resume because of your injuries even a year after the accident?*

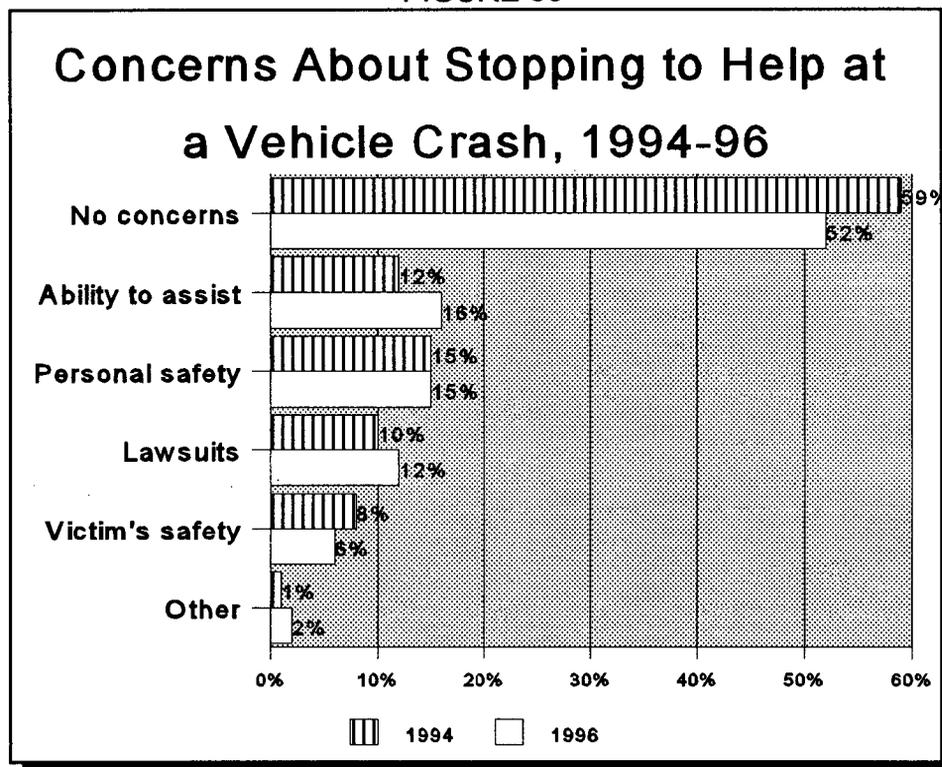
Base: 1994 - Total population; 1996 - Total population.

	1994	1996
<i>Unweighted N</i>	4,020	8,210
Ever injured in a motor vehicle crash	23%	23%
Proportion of population prevented from performing normal activities for at least a week	14%	14%
Proportion of population unable to resume some activities even a year after accident	3%	4%

### CONCERNS ABOUT STOPPING AT A CRASH, 1994-96

During the last two years there appears to have been some slight shift in public opinion concerning stopping at the scene of a vehicle crash to offer assistance (see Figure 39). Overall the proportion saying they had no concern and would stop dropped from 59% to 52%. Half of this change came from "not knowing what assistance to offer"

FIGURE 39



Qx: *Suppose that you are driving. You see an accident happen and no one is there at the scene to help. What concerns might you have about stopping to help? Anything else?*

[Multiple responses accepted in both studies.]

Base: 1994 - Total population; 1996 - Total population.

Unweighted N<sub>(1994)</sub>=4,018; N<sub>(1996)</sub>=4,022

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

Lack of concern and willingness to stop dropped by five percentage points among males between the two surveys (see Table 8). However, the drop among females, at nine points, was almost twice that of males. Both males and females showed an increase in concern about being unable to offer proper assistance, though for females this increase was greater. In addition, females also showed an increase in their concern about lawsuits. Concerns about victim's safety dropped slightly and there was virtually no change in concerns about personal safety.

TABLE 8

**Concerns About Stopping to Help at a Vehicle Crash by Gender, 1994-96**

*Qx: Suppose that you are driving. You see an accident happen and no one is there at the scene to help. What concerns might you have about stopping to help? Anything else?*

[Multiple responses accepted in both studies.]

*Base: 1994 - Total population; 1996 - Total population.*

	1994			1996		
	Total	Male	Female	Total	Male	Female
<i>Unweighted N</i>	4,018	1,759	2,259	4,022	1,894	2,121
No concerns, would stop	59%	63%	56%	52%	58%	47%
Ability to assist	12%	9%	15%	16%	11%	20%
Personal safety	15%	13%	16%	15%	13%	17%
Lawsuits	10%	13%	8%	12%	14%	11%
Victim's safety	8%	9%	8%	6%	6%	6%
Other	1%	1%	1%	2%	2%	3%
Don't know/refuse	5%	3%	6%	4%	3%	5%

1996 Motor Vehicle Occupant Safety Survey:  
Crash Injury & Emergency Medical Services

While willingness to stop decreased among Whites and Blacks fairly substantially, eight and 10 points respectively, willingness to stop increased among Hispanics by five points (see Table 9). Whites reported increased concern about being able to give the proper assistance and possible lawsuits. Blacks also showed an increase in concern about offering proper assistance. In addition they showed increased concern about their personal safety. Hispanics showed increased concern about offering assistance but showed less concern in other categories.

TABLE 9

**Concerns About Stopping to Help at a Vehicle Crash by  
Race/Ethnicity, 1994-96**

Qx: *Suppose that you are driving. You see an accident happen and no one is there at the scene to help. What concerns might you have about stopping to help? Anything else?*  
[Multiple responses accepted in both studies.]

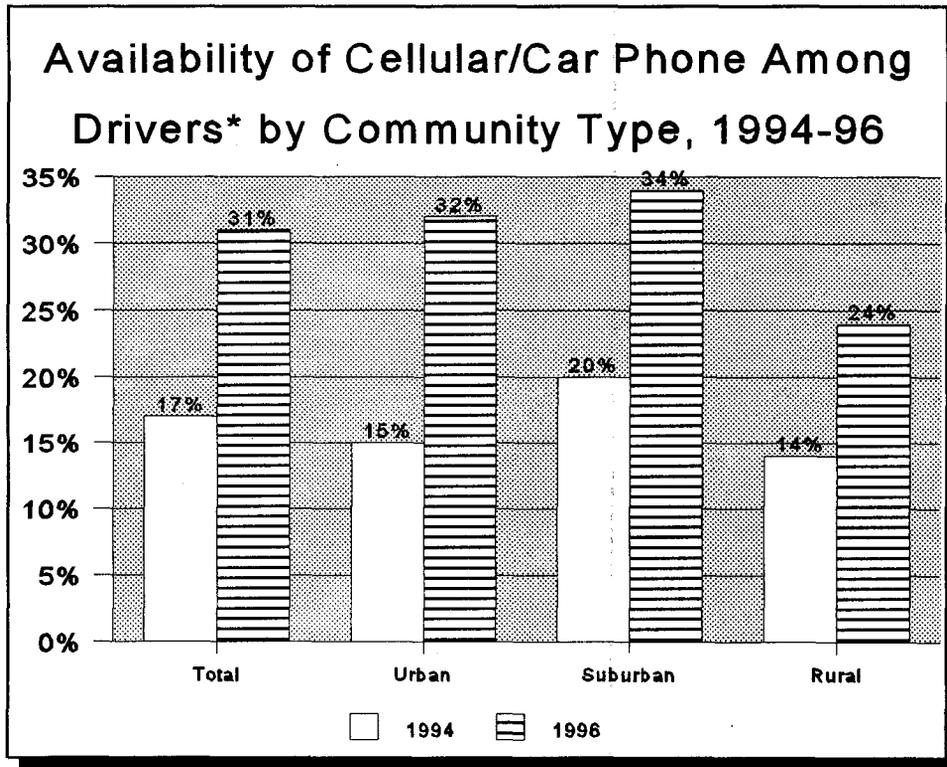
Base: 1994 - Total population; 1996 - Total population.

	1994			1996		
	White	Black	Hispanic	White	Black	Hispanic
<i>Unweighted N</i>	3,138	414	290	3,188	379	355
No concerns, would stop	58%	70%	59%	50%	60%	64%
Ability to assist	13%	6%	11%	17%	11%	15%
Personal safety	16%	8%	11%	16%	12%	9%
Lawsuits	11%	3%	6%	14%	4%	5%
Victim's safety	8%	10%	11%	6%	7%	3%
Other	1%	1%	1%	2%	3%	2%
Don't know/refuse	4%	6%	7%	4%	7%	6%

### AVAILABILITY OF CELLULAR PHONES, 1994-96

In the two years since the early study, the proportion of drivers with a cellular or car phone has almost doubled among drivers, going from 17% in 1994 to 31% in 1996 (see Figure 40). The availability of portable phones grew among drivers in all community settings. It grew in the 14 to 17 percentage point range among drivers living in urban and suburban areas and by 10 points among drivers living in rural areas. Looking at this from a different perspective, availability more than doubled among drivers living in urban areas, and grew by about 70% among drivers living in suburban and rural areas.

FIGURE 40



Qx: 1994 - Do you have a cellular phone in the car you usually drive?  
 1996 - Do you have a car phone or carry a cellular phone in the motor vehicle you usually drive?

Base: 1994 - Drivers; 1996 - Drivers.

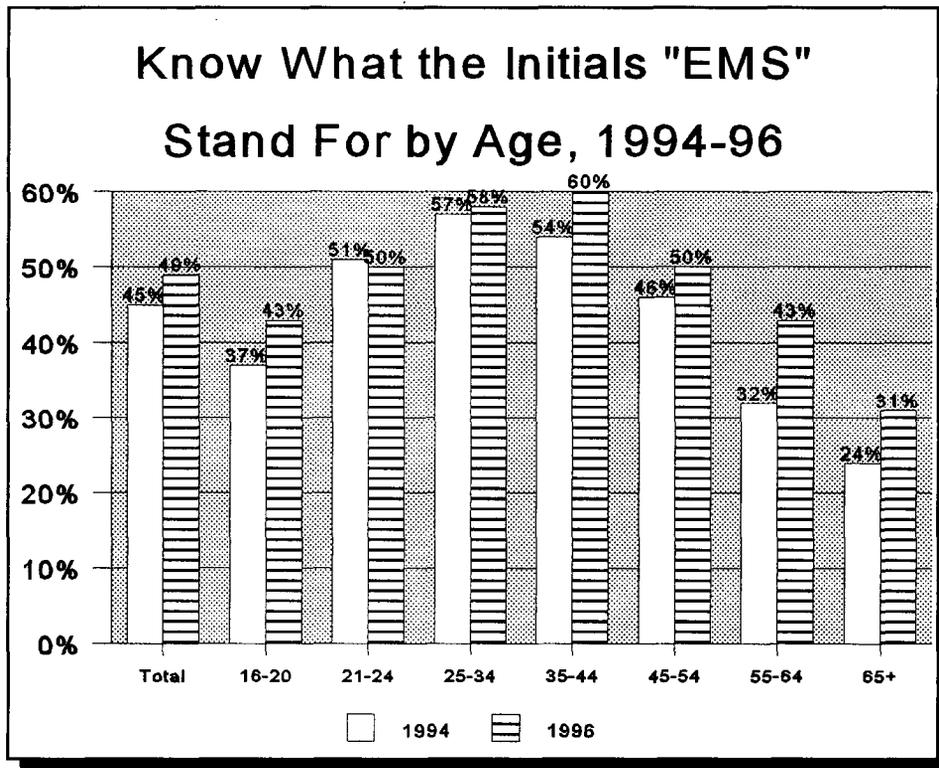
Unweighted N(1994)= 3,685; N(1996)= 3,755

\* This question was only asked of drivers in 1994, so the trended comparison in this section is restricted to drivers in 1996.

**KNOWLEDGE OF INITIALS "EMS", 1994-96**

Overall, the ability to correctly recall what the initials "EMS" stand for grew by about four percentage points (see Figure 41). However, this generalization hides the fact that most of the growth took place in those age groups over 35.

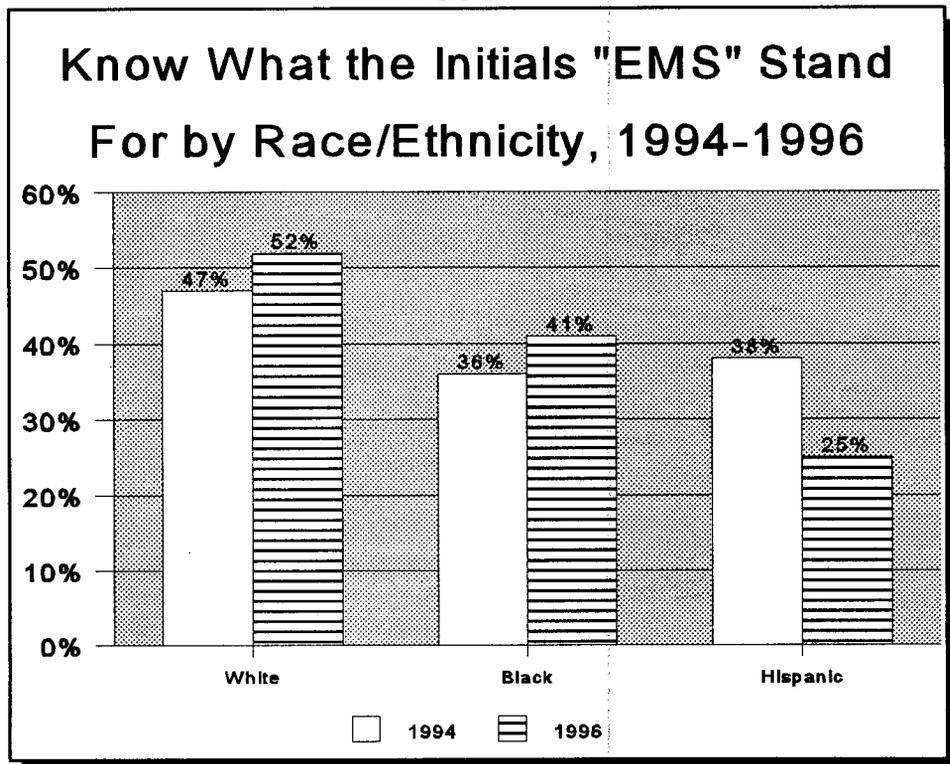
FIGURE 41



Qx: Can you tell me what the initials "EMS" stand for?  
 Base: 1994 - Total Population; 1996 - Total population.  
 Unweighted N(1994)=4,018; N(1996)=4,022

While the proportion of Whites and Blacks who could identify the meaning of the initials "EMS" increased from 1994 to 1996 by five percentage points, the proportion of Hispanics who could identify the meaning decreased by thirteen percentage points (see Figure 42).

FIGURE 42



Qx: Can you tell me what the initials "EMS" stand for?

Base: 1994 - Total Population; 1996 - Total population.

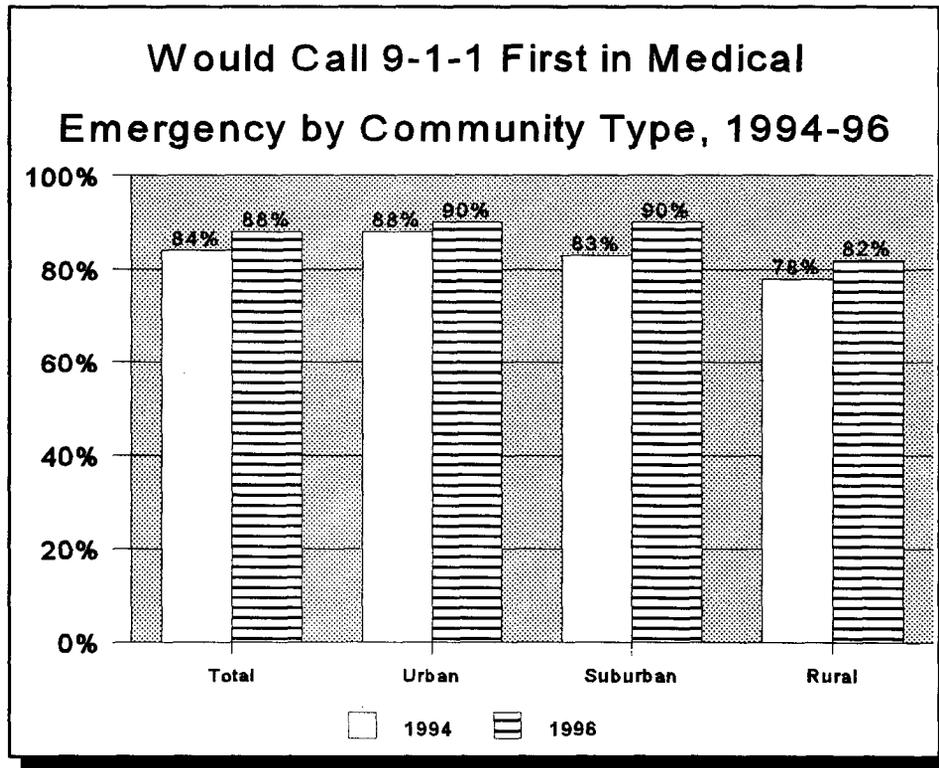
Unweighted N(1994)=4,018; N(1996)=4,022

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

**TELEPHONING FOR HELP, 1994-96**

The 1996 study showed a slight overall increase, from 84% in 1994 to 88% in 1996, in proportion of people who said if they were faced with a medical emergency they would call "9-1-1" first (see Figure 43). While only half this increase (two percentage points) was seen in urban areas, almost twice this increase (seven percentage points) was seen in suburban areas.

FIGURE 43



Qx: *If someone was experiencing a medical emergency and you needed to get help for that person, who would you call first?*

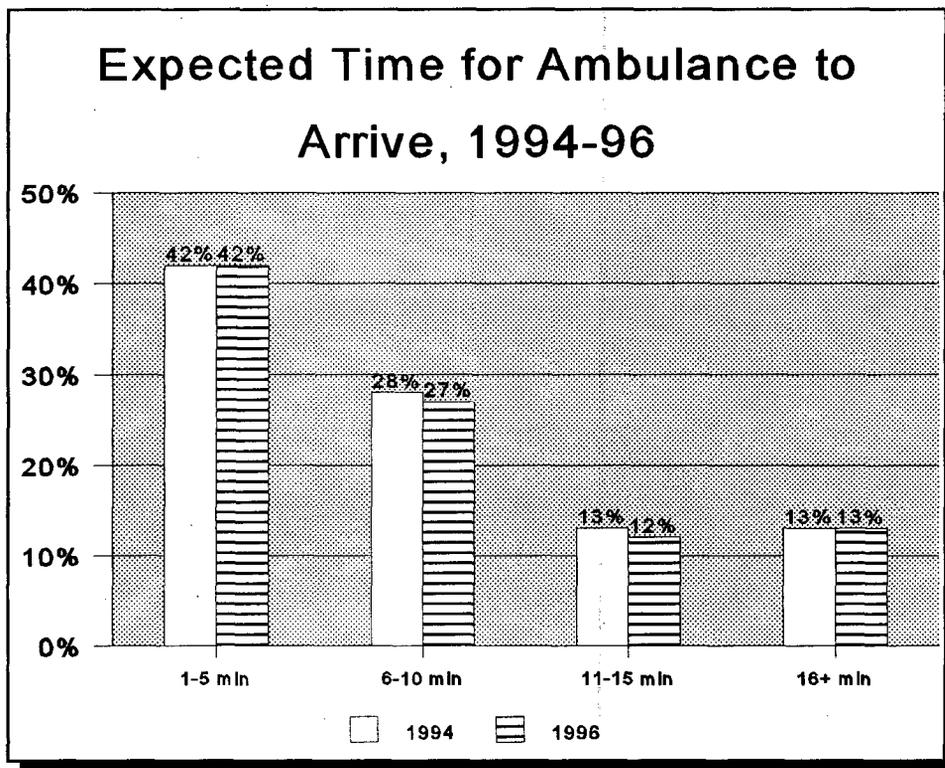
Base: 1994 - Total population; 1996 - Total population.

Unweighted N(1994)=4,018; N(1996)=4,022

## EXPECTATIONS OF EMERGENCY RESPONSE, 1994-96

There has been virtually no change in expected response time in a medical emergency (see Figure 44). The various demographic sub-groups reviewed in this report also showed very little change.

FIGURE 44



Qx: *If there was a medical emergency in your neighborhood and you called an ambulance, how long do you think it would take the ambulance to arrive?*

Base: 1994 - Total population; 1996 - Total population.

Unweighted  $N_{(1994)}=4,018$ ;  $N_{(1996)}=4,022$

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There has been very little change in the expectations of Whites with regard to how long it should take for an ambulance to arrive in a medical emergency between the two studies. In both 1994 and 1996, 71% of Whites expected an ambulance to arrive in 10 minutes or less. Using the same 10 minute threshold, the expectations of Blacks deteriorated slightly (58% in 1994 to 56% in 1996) even though there was a slight improvement in the 5 minute threshold (28% in 1994 to 31% in 1996). While Hispanics showed an eight point improvement at the 5 minute level (30% in 1994 to 38% in 1996), there was only a three point improvement at the 10 minute level (63% in 1994 to 66% in 1996).

TABLE 10

**Expected Time for Ambulance to Arrive by Race/Ethnicity, 1994-96**

Qx: *If there was a medical emergency in your neighborhood and you called an ambulance, how long do you think it would take for the ambulance to arrive?*

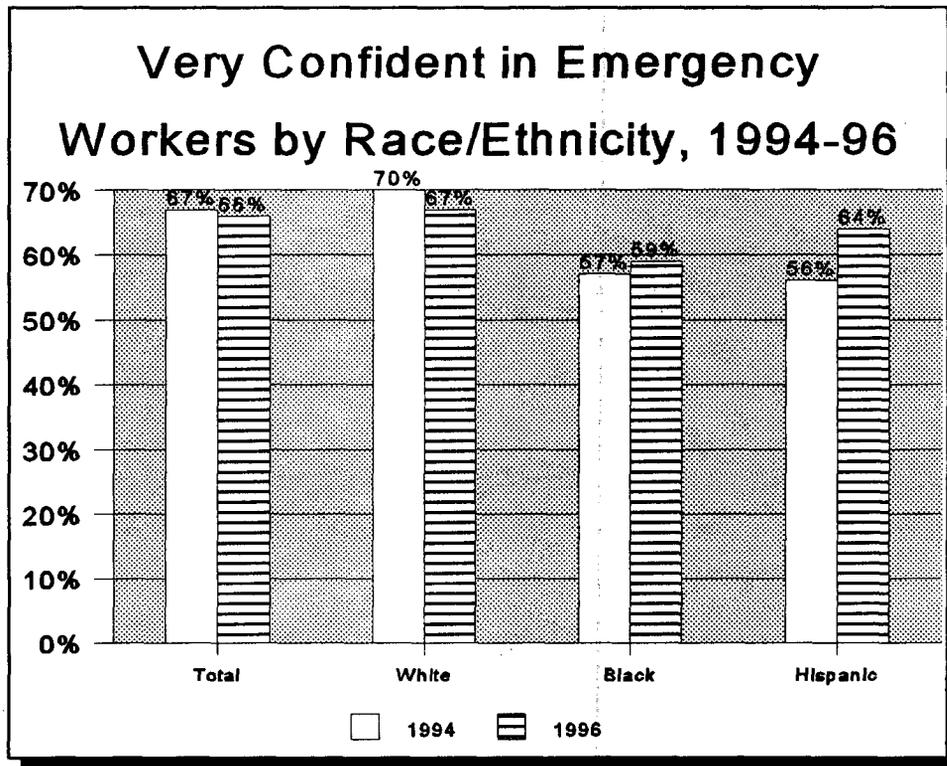
Base: *1994 - Total population; 1996 - Total population.*

	1994			1996		
	White	Black	Hispanic	White	Black	Hispanic
<i>Unweighted N</i>	3,138	414	290	3,188	379	355
1 to 5 minutes	45%	28%	30%	44%	31%	38%
6 to 10 minutes	26%	30%	33%	27%	25%	27%
11 to 15 minutes	14%	14%	13%	12%	15%	12%
16 or more minutes	12%	21%	18%	12%	20%	18%

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Overall, the proportion who reported being very confident in emergency workers knowing what to do decreased one percentage point from 67% in 1994 to 66% in 1996 (see Figure 45). However, while the confidence level declined slightly among Whites (from 70% percent in 1994 to 67% in 1996), confidence increased among Blacks (from 57% in 1994 to 59% in 1996) and, to a greater extent, among Hispanics (from 56% in 1994 to 64% in 1996).

FIGURE 45



Qx: *Regardless of the type of medical emergency, how confident are you that the ambulance or other emergency workers would know what to do?*

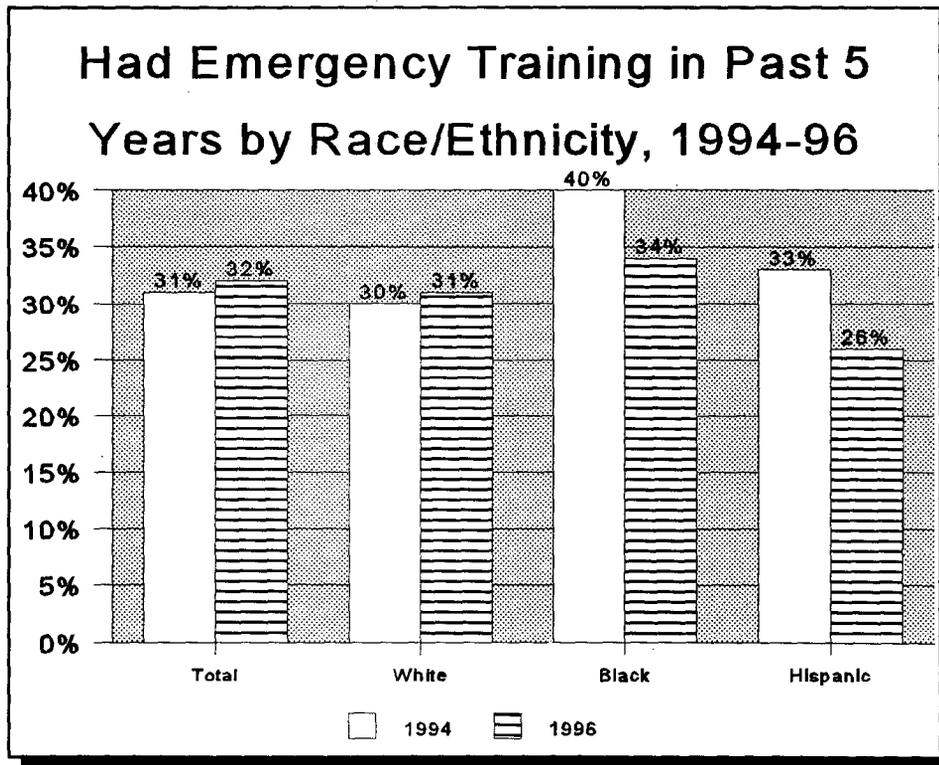
Base: 1994 - Total population; 1996 - Total population.

Unweighted N<sub>(1994)</sub>=4,018; N<sub>(1996)</sub>=4,022

**INTEREST IN TRAINING TO ASSIST CRASH VICTIMS, 1994-96**

The proportion of the population who had taken first aid or emergency training in the last five years increased by one percentage point from 31% in 1994 to 32% in 1996 (see Figure 46). However, while the proportion of Whites who had training in the last five years went up by one percentage point, the proportion of Blacks and Hispanics who reported having a training course decreased from the previous survey (six points and seven points respectively).

FIGURE 46



Qx: *In the past 5 years, have you taken any kind of emergency or first aid training?*

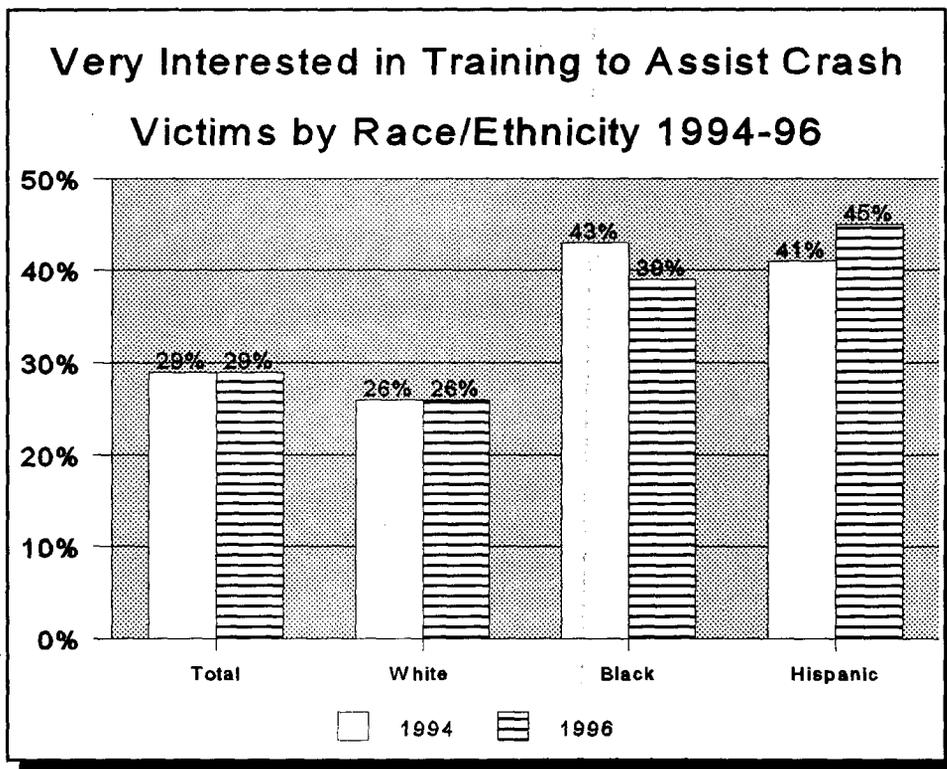
Base: 1994 - Total population; 1996 - Total population.

Unweighted N(1994)=4,018; N(1996)=4,022

1996 Motor Vehicle Occupant Safety Survey  
Crash Injury & Emergency Medical Services

Overall interest in taking a training course to assist crash victims, as measured by those who said they were "very interested" did not change from the 29% reported in the 1994 study. The proportion of Whites who were very interested in such a course also did not change from the 26% reported in 1994. Interest among Blacks declined four percentage point between the two studies (43% in 1994 to 39% in 1996) but increased an equal amount among Hispanics (41% in 1994 to 45% in 1996)

FIGURE 47



Qx: Assuming it was at low cost and in a convenient location, how interested would you be in taking training on how to assist injured persons in vehicle crashes?

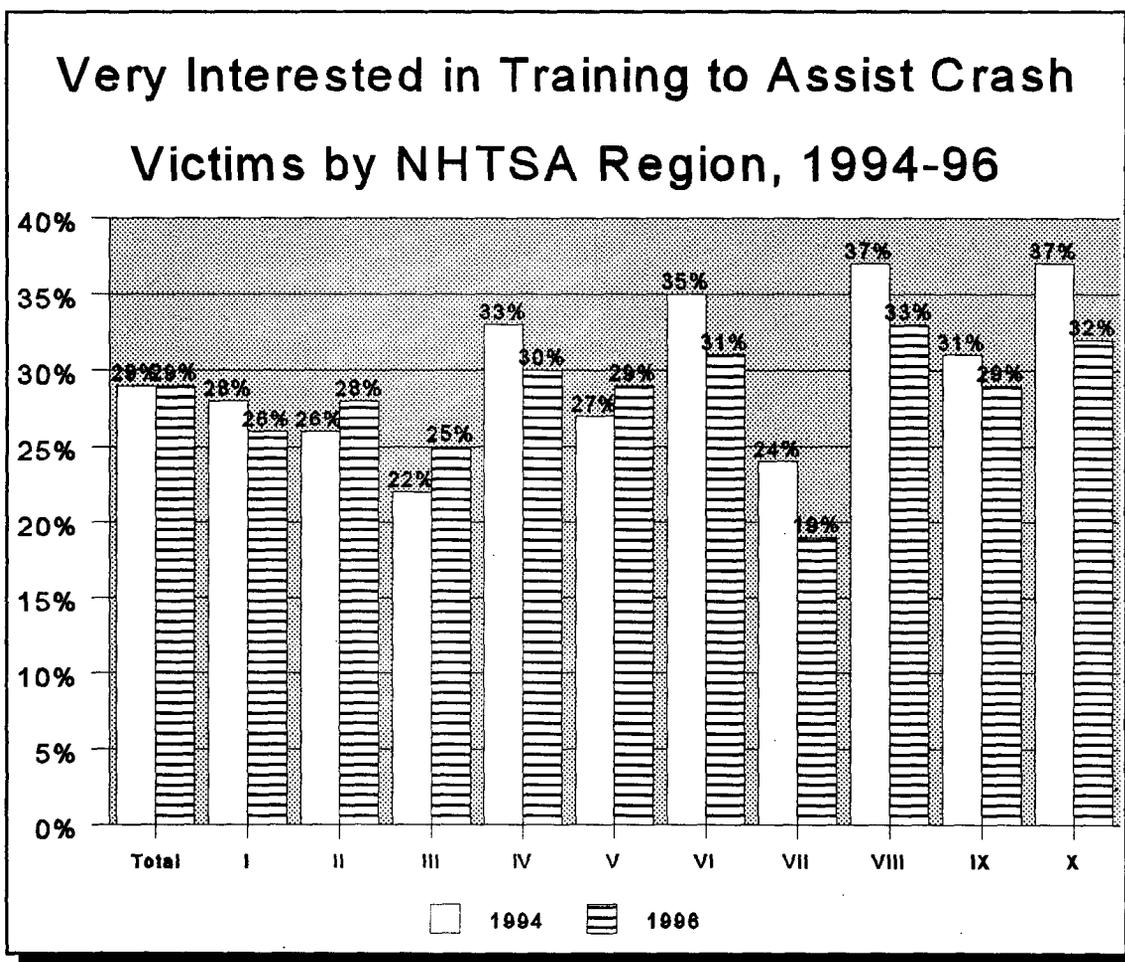
Base: 1994 - Total population; 1996 - Total population.

Unweighted N<sub>(1994)</sub>=4,018; N<sub>(1996)</sub>=4,022

**1996 Motor Vehicle Occupant Safety Survey:  
Crash Injury & Emergency Medical Services**

Interest in taking a training course to assist crash victims, as measured by those who reported being "very interested" in taking a course, increased in three of the ten NHTSA regions — Region II by two points, Region III by three points, and Region V by two points. It decreased in the remaining seven regions by two to five points. The largest decreases were in Regions VII and X, both by five points.

FIGURE 48



Qx: Assuming it was at a low cost and in a convenient location, how interested would you be in taking training on how to assist injured persons in vehicle crashes?

Base: 1994 - Total population; 1996 - Total population.

Unweighted N(1994)=4,018; N(1996)=4,022

## CONCLUSION

Several points can be made about the trends seen between the 1994 and 1996 studies:

- There has been no change in the percentage of the population that has been injured in a vehicle crash.
- People have more concerns in 1996 about stopping at the scene of a vehicle crash and a major portion of the increase in concern relates to an increased feeling of not being able to offer the proper care.
- The proportion of drivers who have a car or cellular phone with them when they drive has increased dramatically in **all** community types.
- There has been a slight increase in the ability to identify the initials "EMS". The modest increases shown among Whites and Blacks is offset by a decline among Hispanics.
- There has been an increase in the likelihood of calling 9-1-1 first in the event of a medical emergency.
- There has been no change in the expected time for an ambulance to arrive when called for a medical emergency.
- Confidence in the ability of EMS personnel to give the appropriate assistance in the event of a medical emergency declined slightly among Whites but increased among Blacks and Hispanics.

It should be noted that these results are based on only two points in time and the two points are only two years apart. Future studies will be better able to substantiate these trends.

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