



# VITALS

For Medical Transport Professionals

A Weekly Safety Newsletter

## Stopping Distances

Remember that the stopping distances below are averages, based upon well-maintained braking components and good road conditions. **Total stopping distance** includes perception time, reaction time and stopping distance. Perception time (not shown below) is the time it takes a driver to see and recognize a hazard and then act. Perception time averages about 2/3 of a second. That's another 72 feet added to the total stopping distance, at a speed of 75 MPH. Looking at the graph below, you would add the perception distance of 72 feet to the total stopping distance of 504 feet, for a total of 576 feet, for a truck traveling at 75 MPH.

SPEED IN		AVERAGE STOPPING DISTANCES			TOTAL STOPPING DISTANCES	
Miles per Hour	Feet per Second	Automobile Brakes in Feet	Truck Brakes on All Wheels in Feet	Average Driver Reaction Time (3/4 seconds) in Feet	Automobiles in Feet	Trucks in Feet
10	14.67	5	7	11	16	18
15	22.0	12	17	16	28	33
20	29.34	21	30	22	43	52
25	36.62	32	47	27	59	74
30	44.0	47	67	33	80	100
35	51.3	63	92	38	101	130
40	58.7	82	120	44	126	164
45	66.0	104	152	50	154	202
50	73.3	128	187	55	183	242
55	80.7	155	227	61	216	288
60	88.0	185	270	66	251	336
65	95.3	217	316	71	288	387
70	102.6	252	367	77	329	444
75	109.9	289	422	82	371	504
80	117.2	328	480	88	416	568
90	132.0	425	607	99	524	706
100	146.6	514	750	109	623	859

Speed increases total stopping distance. It also increases forces when a vehicle collides with another vehicle, an animal or another object. Speed reduces the driver's ability to control the vehicle. If conditions are less than perfect, speed plays an even greater role in these factors.

Source: James Madison University

### Erratum

In the previous issue of "Vitals" we used "break" in its various forms rather than "brake". Thanks to several astute readers who brought it to our attention."

Sponsored By:



Ray Crewey, EMTP, owner of Summers County Emergency Medical Services, Inc. in Pipestem, West Virginia, has a novel approach to public perceptions of ambulance driving speed. Ray recalled that after responding to a call a woman came up to him and said, "That siren was going 100 miles an hour!" Instead of getting into a discussion of sound traveling at the speed of sound and the siren traveling at the speed of the ambulance, Ray purchased a speed gun and mounted it in the Supervisor vehicle.

Ray makes it a point to monitor non-emergency calls, returns from calls, as well as emergencies. He's been doing this for some time and has not seen excessive speed from his units. Ray concludes, "So far it works, if they know you can see how fast they are going they seem to drive slower."

Our thanks to Ray for sharing this tip. Got a SAFETY TIP you'd like to share? Send it to [meszczygiel@thomcoins.com](mailto:meszczygiel@thomcoins.com)

This publication is provided for information purposes only and is not intended as a complete or exhaustive source of compliance or safety information. This "Safety Brief" is advisory in nature and does not warrant, guarantee, or otherwise certify compliance with laws, regulations, requirements, or guidelines of any local, state, or Federal agency.

Join Us For The  
**EMS Safety Net**  
Seminar



May 6-8 2008

Dallas, Texas

Click Here for More Detail