



## Basic Emergency Vehicle Operators Course

### Following Another Vehicle





# Following Another Vehicle

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## Objectives:

**By the end of this module, students will be able to:**

**Will be able to describe two methods of estimating following distance .**

**Given a list of several conditions, will be able to select those that indicate following distance should be increased**

**Given a list of several statements relating to following distance, will be able to identify those that are correct**





# Following Another Vehicle

There are at least 2,000 deaths each year related from crashes caused by vehicles that were following too closely





# Following Another Vehicle

## Guidelines:

**Three things the EV Operator must learn to be able to follow at appropriate, safe distances.**

**What is a safe following distance?**

**Techniques to judge or estimate following distance**

**When to increase following distance**





# Following Another Vehicle

## What is a Safe Following Distance

**An EV operator is following at a safe distance when able to:**

**Stop without hitting the vehicle in front of them**

**Allow enough room to make an evasive action if the vehicle in front of them suddenly stops**







# Following Another Vehicle

## How to set a safe following distance

**Safe following distances vary depending on what speed you are travelling, what conditions you are driving in and what type of vehicle you are driving.**

### **2 Second Rule**

- ideal traffic conditions
- speeds less than 35 MPH.

### **3 Second Rule**

- limited visibility
- speeds greater than 40 MPH

### **4 Second Rule**

- poor conditions
- speeds greater than 60 MPH

**Remember to increase your following distance in poor conditions or if you are driving a heavy vehicle**





# Following Another Vehicle

## Reaction Distance

The distance a vehicle travels from the time the driver recognizes the need to stop until the brake pedal is pressed.

Average driver requires about  $\frac{3}{4}$  sec. to react.

Reaction time is influenced by:

Driver alertness

Driver age

Speed

Fatigue





# Following Another Vehicle

## Braking Distance

The distance a vehicle travels from the time the brakes engage until the vehicle comes to a full stop.

There is no set distance.

Braking Distance is effected by:

Driver muscle

Vehicle speed

Vehicle weight

Vehicle condition

Surface conditions







# Following Another Vehicle

## Sample Braking Distances

**Threshold Braking Technique**

**110-120**

**Antilock Braking System**

**120-130**

**Stabbing/Jabbing Brake Method**

**130-150**

**Locked Brake Method**

**150-180**

**Traditional Pumping Method**

**180-200**

Dry, level surface comparisons

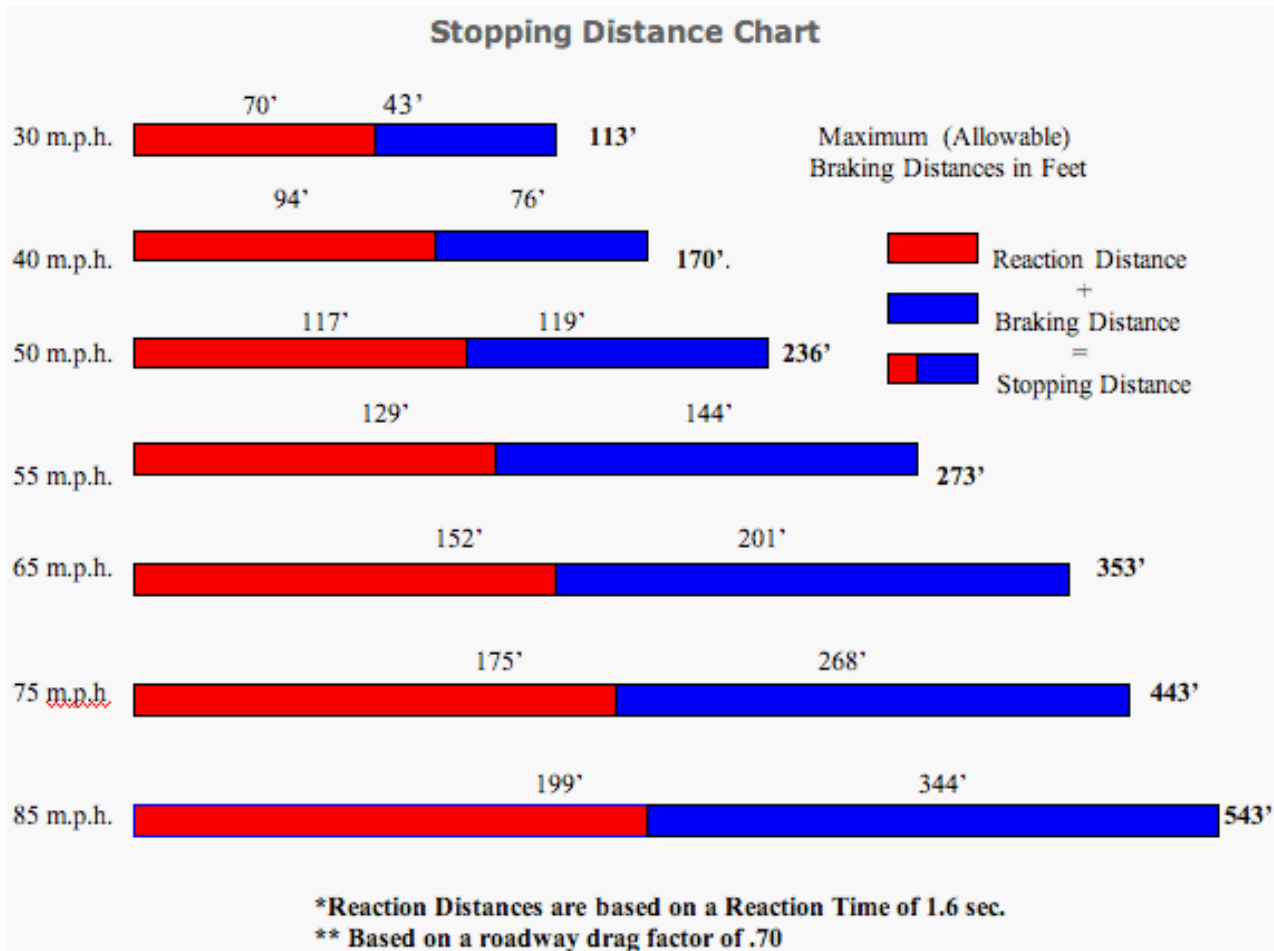
**BRAKING  
DISTANCE  
@ 60 mph**





# Following Another Vehicle

## Total Stopping Distance Chart





# Following Another Vehicle

## Braking Distance

**Remember - 1:** When the road is icy or covered with compacted snow, or diesel fuel has been spilled (which is a particular risk near certain gas stations) *the 'braking distance' for your vehicle can be as much as ten times further than for dry roads/pavement.*

**Remember - 2:** Any fool can drive fast enough to be dangerous!





# Following Another Vehicle

**When to increase following distance.**

**When Weather Conditions Deteriorate**

**Low visibility (fog, blinding snow, etc.)**

**Hard Rain**

**Storm conditions**





# Following Another Vehicle

## Setting Following Distance

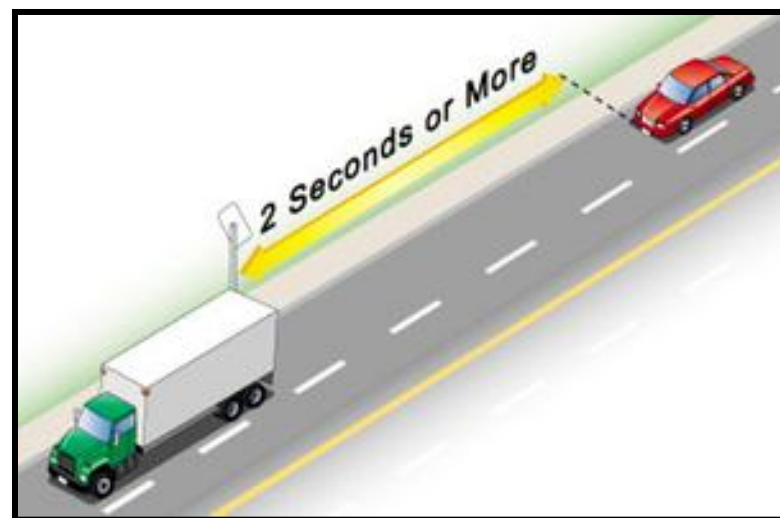
2 -3 seconds is recommended under ideal conditions

3- 4 seconds is recommended at speeds above 40 MPH and poor conditions, or larger vehicles

5-6 seconds if road & weather conditions are not good.

Heavy snow

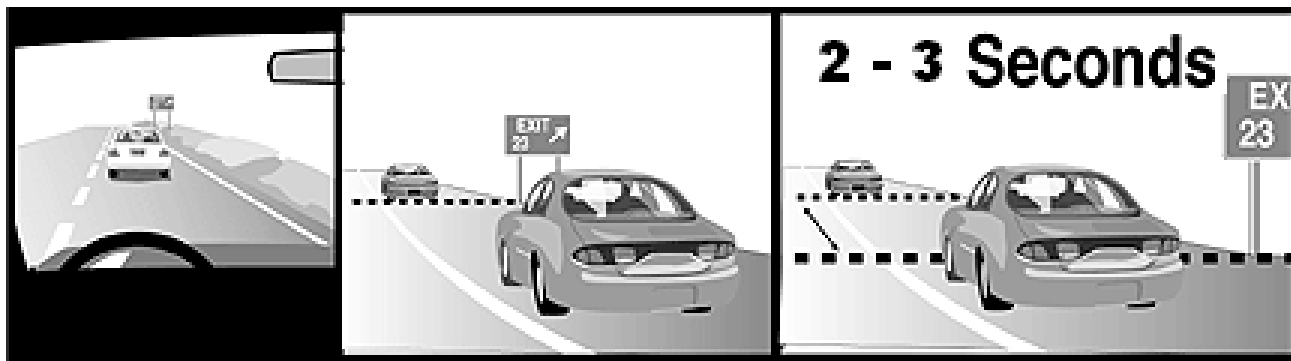
Ice





# Following Another Vehicle

## Two - Three Second Rule



- 1) Select a fixed object
- 2) When the vehicle in front of you passes that object start your count
- 3) You should not reach the object prior to the three second count
- 4) Adjust your distance and reevaluate







# Following Another Vehicle

## Considerations

Many operators reactions and performance degrade under :

Stress

Use of lights & siren

Driver distraction

Motorist may react in unpredictable ways to lights and siren.

A greater following distance permits the EV operator to get the “big picture”.

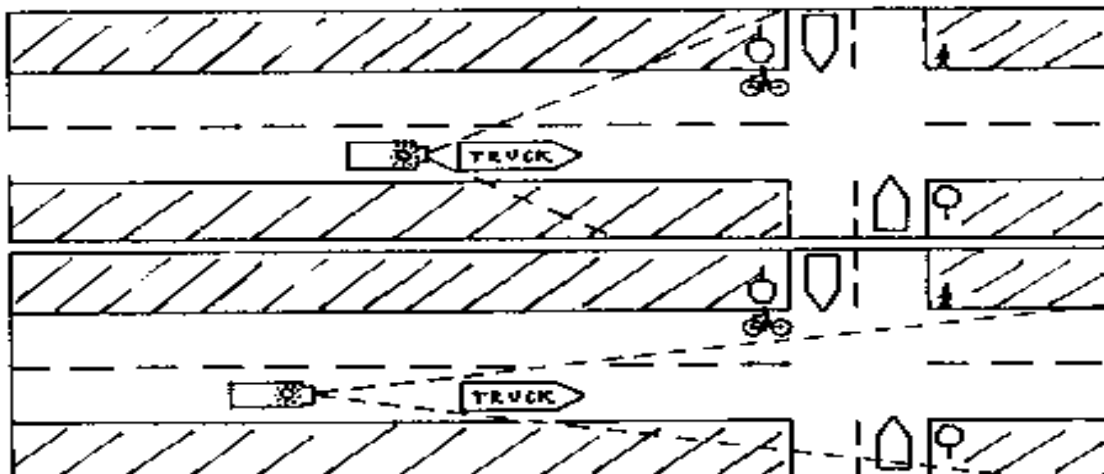




# Following Another Vehicle

## PRACTICE

What are the effects of following too closely?





# Following Another Vehicle

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## SUMMARY

**In spite of stress and urgency of an emergency run,  
the laws of physics do not change.**

**The higher the speed, the longer it will take to stop**

**The heavier the vehicle the longer it will take to  
stop**





## REVIEW QUESTIONS

1) How does an EV driver/operator determine a safe following distance?

2) What is Reaction Distance?

3) What is Braking Distance?

4) When does an EV driver/operator need to increase following distances?

