

Be Ready, Be Safe, Be Responsible

## XIII. Driving Emergencies-Part 2

1. Vehicle Failure

**2. Driver Error**

3. Collisions & Traffic Stops

# Manual

Lessons and Hints to Work With  
Your New Teen Driver  
Part 13



**IUP** Institute for  
Rural Health & Safety

Be Ready, Be Safe, Be Responsible

Common Driving Emergencies: **EMERGENCY SITUATIONS**

1. Vehicle Failure
2. Driver Errors
  - Poor Decision Making/Judgement
  - Operation Errors
    - Speed
    - Steering
    - Traction
    - Distraction
3. Collision Avoidance

Be Ready, Be Safe, Be Responsible

Emergency situations  
Common Driving Emergencies:

- Vehicle Failure
  - Driver Errors
- Decision Making/Judgement  
Operation
- Speed
  - Distraction
  - Steering
  - Collision Avoidance

Poor Decision Making/Judgement **EMERGENCY SITUATIONS**

**Decision-making:**

- Is a process
- It must be taught and practiced to be effective.

**Young drivers:**

- must understand that it is not how much they know, but rather what they know to make effective driving decisions based on risk management strategies.

**For young people to develop a positive attitude toward decision-making and its impact on safe driving they will :**

- need to be exposed to accurate information regarding its use and
- participate in perception changing experiences

Be Ready, Be Safe, Be Responsible

**Decision-making:**

- Is a process
- It must be taught and practiced to be effective.
- Must be given value

**Young drivers:**

- must understand that it is not how much they know, but rather what they know to make effective driving decisions based on risk management strategies.

**For young people to develop a positive attitude toward decision-making and its impact on safe driving they will :**

- need to be exposed to accurate information regarding its use and
- participate in perception changing experiences

Decision Making/Judgement

**What is the Ultimate Goal of Driving?**

To be able to drive from point A to point B-

- **Safely**
- **Efficiently**

A → B

## Distractions and Perception

### The Ultimate Goal

What is the ultimate goal of driving?

- The “ultimate goal” of driving is to be able to travel to a destination safely and efficiently.
- Distracted driving affects a great deal of the task of driving and is a major obstacle to achieving this goal.
- How can you increase your chances of achieving this ultimate goal regularly?

Distractions and Perception

**The Ultimate Goal**

**HOW?**

By developing the Habits, Skills, Attitudes and Behaviors To:

1. **Protect YOURSELF**
2. **Protect OTHERS**

BE READY, BE SAFE, BE RESPONSIBLE

### HOW?

- Being a safe driver is more than just applying physical skills.
- Everyone has habits, both good and harmful. A habit is a routine that we practice as a part of our everyday lives. Many of these behaviors that we develop are things that we’ve learned and practiced to the point that we don’t even think of them. They become second nature. We are conditioned to these practices.
- It is possible to break or avoid harmful habits and learn attitudes and behaviors that can help you as a driver to:
  - protect yourself, and
  - protect others

Distractions and Perception

**The Ultimate Goal**

**HOW?**

- Driving Skills and Habits can be learned and improved upon.
- So can Attitudes and Behaviors.

**BE READY, BE SAFE, BE RESPONSIBLE**

- **Driving Skills and Habits can be learned and improved upon.**
- **So can Attitudes and Behaviors.**

**Decision Making /Judgement**

**Decision Making Process:**

- **The Choice to be AWARE of:**
  - **Right and Wrong Behavior**
  - **Correct and Incorrect Decisions**

**BE READY, BE SAFE, BE RESPONSIBLE**

- Decision Making Process**
- We make conscious and unconscious decisions.
  - Everything involved in the driving task involves making decisions.
  - In the decision-making process, you can consciously choose according to what you perceive and know.
  - To help achieve the “ultimate goal” the choice is to be aware of the correct behaviors that will help you to avoid incorrect decisions.

**Poor decision making/Poor Judgement**

**Speed-**  
Affects safety even when driving at the speed limit but too fast for conditions.

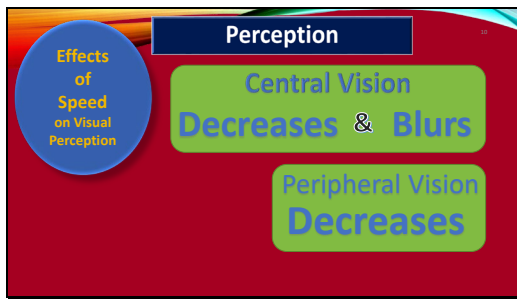
- Weather
- Road surface
- Visibility
- Traffic conditions
- Vehicle condition

**Consequences of speeding-**

- Loss of vehicle control
- Increase crash severity
- Inability to stop in time
- Decrease in occupant protection equipment
- Economics of damage and injury.

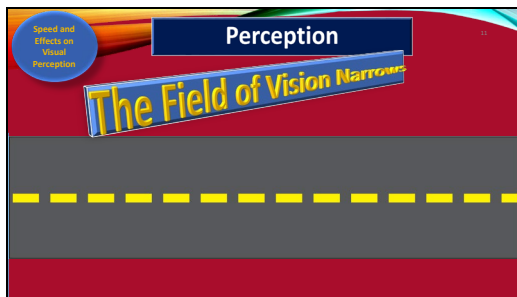
**Be Ready, Be Safe, Be Responsible**

- Poor decision making/Poor Judgement**
- Speed-**  
Affects safety even when driving at the speed limit but too fast for conditions.
- Weather
  - Road surface
  - Visibility
  - Traffic conditions
  - Vehicle condition
- Consequences of speeding-**
- Loss of vehicle control
  - Increase crash severity
  - Inability to stop in time
  - Decrease in effectiveness of occupant protection equipment
  - Economics of damage and injury.



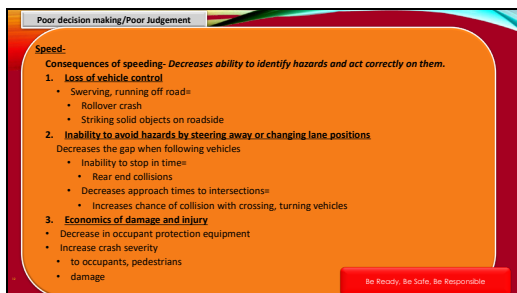
## Effects of speed on Field of Vision

- It takes time for the brain to process the incoming information that it receives. It must organize it, classify it, and make it meaningful. In a moving vehicle, that time is limited. The speed that a vehicle is travelling can affect the field of vision of the driver.



## Effects of speed on Field of Vision

It takes the mind time to process the incoming information-to organize it, classify it and make it meaningful. In a moving vehicle, time is limited.



## Poor decision making/Poor Judgement

### Speed-

Consequences of speeding- Decreases ability to identify hazards and act correctly on them.

### Loss of vehicle control

- Swerving, running off road=
- Rollover crash
- Striking solid objects on roadside

Inability to avoid hazards by steering away or changing lane positions

Decreases the gap when following vehicles

- Inability to stop in time=
- Rear end collisions
- Decreases approach times to intersections=
- Increases chance of collision with crossing, turning vehicles

Economics of damage and injury

- Decrease in occupant protection equipment
- Increase crash severity
- to occupants
- damage

Poor decision making/Poor Judgement

**Speed-** speed limits are engineered for safe driving in all areas. They aren't just random.

- Observe speed limit and warning traffic signs.
- Adjust speed to driving conditions and the driving environments you are in.
- Know what hazards and situations to expect in these areas.
- Know how to act on these hazards and situations.

VI Residential Driving Environment-Manual (pdf)  
 VII Open Highway Driving Environment-Manual (pdf)  
 VIII Expressway Driving Environment-Manual (pdf)  
 IX Rural Driving Environment-Manual (pdf)  
 X A & B Suburban and Urban Driving Environment-Manual (pdf)  
 XI Part A Right of Way-Manual (pdf)  
 XII Part B Right of Way Manual (pdf)  
 XIII Adverse Driving Conditions Visibility-Manual (pdf)  
 XIV Driving in Bad Conditions-Manual (pdf)

Be Ready, Be Safe, Be Responsible

**Speed-** speed limits are engineered for safe driving in all areas. They aren't just random.

- Observe speed limit and warning traffic signs.
- Adjust speed to driving conditions and the driving environments you are in.
- Know what hazards and situations to expect in these areas.

Know how to act on those hazards and situations.

- [Residential Driving Environment-Manual \(pdf\)](#)
- [Open Highway Driving Environment-Manual \(pdf\)](#)
- [Expressway Driving Environment-Manual \(pdf\)](#)
- [Rural Driving Environment-Manual \(pdf\)](#)
- [A & B Suburban and Urban Driving Environment-Manual \(pdf\)](#)
- [Part A Right of Way-Manual \(pdf\)](#)
- [Part B Right of Way Manual \(pdf\)](#)
- [Adverse Driving Conditions Visibility-Manual \(pdf\)](#)
- [Driving in Bad Conditions-Manual \(pdf\)](#)

LOSS OF CONTROL

Be Ready, Be Safe, Be Responsible

### TWO WHEEL DROP-OFF

Soft shoulders and high road edges create hazards to the unaware driver.

- If the right wheels drop off the road anticipate better traction with the left wheels that remain on the pavement.
- Reduce speed,
- Steer straight, don't brake dramatically.
- Let the momentum of the vehicle slow naturally then gradually work back onto the pavement.

Be Ready, Be Safe, Be Responsible

### Two Wheel Drop-Off

Soft shoulders create hazards to the unaware driver.

- If the right wheels drop off the road anticipate better traction with the left wheels that remain on the pavement.
- Reduce speed,
- Steer straight, don't brake dramatically.
- Let the momentum of the vehicle slow naturally then gradually work back onto the pavement.

### OFF-ROAD RECOVERY

• Do not panic and jerk the steering wheel

• Look to safe path of travel on roadway

• Ease off accelerator/Don't brake hard

• Align vehicle with edge of road

• Check oncoming/following traffic

• Return to road gradually with proper steering technique

Be Ready, Be Safe, Be Responsible

### Off-Road Recovery

● Do not panic and jerk the steering wheel

● Look to safe path of travel on roadway

● Ease off accelerator/Don't brake hard

● Align vehicle with edge of road

● Check oncoming/following traffic

● Return to road gradually with proper steering technique

## DROP-OFF RECOVERY

CLICK FOR VIDEOS



- [Drop Off Recovery 1](#)
- [Drop Off Recovery 2](#)

Be Ready, Be Safe, Be Responsible

## CURVE CONTROL






Be Ready, Be Safe, Be Responsible

## CURVE CONTROL

• BROADEN YOUR SEARCH

- Look over, through and between.
- Search areas and visibility change with the seasons.

Be Ready, Be Safe, Be Responsible

### General hints

- **BROADEN YOUR SEARCH**
- Look over, through and between.
- Search areas and visibility change with the seasons.



## CURVE CONTROL

- Decelerate and brake straight
- If you brake hard in a curve, you can skid and continue going straight.

Be Ready, Be Safe, Be Responsible

## General hints Curve Physics

- Decelerate and brake while straight
- If you brake hard in a curve, you can skid and continue going straight.

## NEGOTIATING CURVES -VIDEO

CLICK FOR  
VIDEO

Negotiating Curves and Hills



Be Ready, Be Safe, Be Responsible

## Eye Habits for Curves

- Picture Path of Travel
- Look down Middle of the travel lane
- Look As High and Far Ahead As Possible



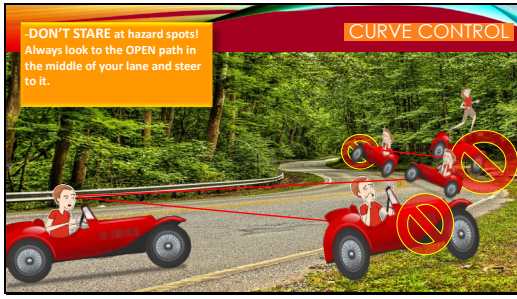
## Look far ahead

Have a visual lead of at least twenty to thirty seconds when conditions permit it. You need space and time for controlling your vehicle and for making decisions.



We tend to steer where we look.

- Thus, drivers who use the right edge of the roadway or the centerline as a main point of reference, usually end up with poor lane positioning and low-aim steering.
- You can use these as a quick reference for your lane position, but you should always get your eyes back to the center of the path.
- It is all right to check the lane position of the vehicle by aligning a reference part of the vehicle with the right lane line, but this is only a quick check and not to continuously focus on this reference point.
- When going through a curve, a driver will have a tendency to focus their eyes close to the car; and the eyes should be looking through the curve as much as possible. A quick lane position check can be done with the lane line, but the eyes need to get back to the projected path of travel.
- Multiple Targets
- Targets change with vehicle movement
- Eyes move ahead with the vehicle-Don't Stare at one spot.



Remember that for most drivers, their eyes will fail them in sudden emergencies, e.g., when entering a curve too fast, their sight distance will shrink, and their eyes will focus on the inside of the curve. When attempting to avoid a collision, their eyes will stare at the collision and not look through it.

When encountering a sudden rear wheel skid, their sight distance will shrink and their eyes will focus immediately on the front of the car, making it more difficult to recover from a skid. All of these failures result in a greater risk of having a collision or losing control of the vehicle.

**-DON'T STARE at hazard spots!**  
**Always look to the OPEN path in the middle of your lane and steer to it.**



Distractions and their effects on perception and driving. Special focus is on cell phone distractions and driving with the objective of informing and guiding the novice driver and passengers to the conscious decision and commitment to avoid cell phone tasks when driving.

