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**UNIT EIGHT: MALFUNCTIONS,  
WEATHER, CRASHES, TRAFFIC STOPS  
&  
HOW TO AVOID THEM**



# Objectives For Unit Eight

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**How should I drive in rain, snow or even ice?**

**I just got into a crash. What do I do now?**

**What happens if I get stopped by law enforcement ?**

**What happens if my vehicle breaks down?**

**What about night driving?**

# Objectives For Unit Eight

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- Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.
- Student will evaluate the risks in various adverse weather conditions.
- Student will examine the role speed plays in collisions.
- Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.

# What Are Adverse Conditions?

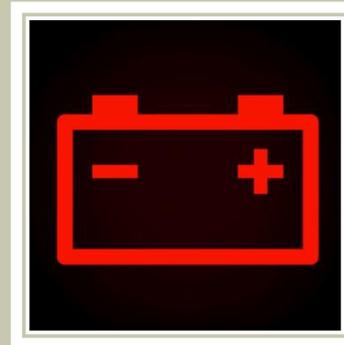
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- **Mechanical Malfunctions**
  - **Environmental Issues**
  - **Legal Issues**
- **All the things that can go wrong with your vehicle and what to do.**
  - **Weather and what to do in snow, rain, ice, and wind.**
  - **Night Driving.**
  - **Crashes and law enforcement.**

# Mechanical Failures

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- **Tire Failure**
- **Accelerator Failure**
- **Brake Failure**
- **Engine Failure**
- **Steering Failure**
- **Car fires**



**Vehicle problems are frequently preceded by a warning light or indicator.**

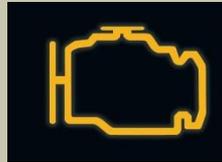
# Dashboard Warning Symbols

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- **Green dashboard indicators: a system is working.**



- **Yellow dashboard indicators: some system has a problem and it needs to be fixed.**



- **Red dashboard indicators: a system that is about to fail, and your vehicle may no longer be roadworthy.**



# Tire Failures

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## How will you know?

- Loud noise and your car may pull in the direction of the tire that is blown out.

## What should you do?

- Remain calm.
- Search for a safe place to leave road.
- Grip the wheel firmly.
- Take your foot off accelerator.
- Do not brake - allow vehicle to slow.
- Turn on flashers.
- Steer to a safe area if possible.



# **Tires: Flat & Bald Does Not Work**

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**VIDEO TO BE DISPLAYED  
DURING CLASSROOM  
INSTRUCTION.**

# **Tires: Flat & Bald Does Not Work**

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**VIDEO TO BE DISPLAYED  
DURING CLASSROOM  
INSTRUCTION.**

# Accelerator Failure

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## How will you know?

- The gas pedal will not move up or down. The “RPM’s” may increase. Vehicle may start to pick up speed.

## What should you do?

- Stay calm and shift to neutral.
- May want to try pumping gas pedal to see if it will respond.
- Search for a safe place to get off the road.
- Steer smoothly/brake as gently as possible.
- Pull off roadway.
- Turn off vehicle.



# Engine Failure: Why?

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- **When was the last time you checked or changed the oil in your car?**
- **Are you pulling away every morning and there is a puddle of oil?**
- **Do you know what the symbol at the right means for your engine?**
- **When was the last time you checked your coolant?**
- **Did you drive through standing water?**



# Engine Failure: What Happens?

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## How will you know?

- You may hear a loud bang, and the noise may continue.
- You may lose power to the engine although you may still be able to drive.

## What should you do?

- Shift to NEUTRAL.
- Search for a safe place off the road.
- Put on your flashers to indicate that you are in trouble.
- DO NOT BRAKE.
- Carefully work your way over to closest side of the road way and pull off.



# Engine Overheat

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## How will you know?

- Temperature gauge will go into “red zone.”
- May start to see steam coming from under the hood.

## What to do?

- Turn off AC system.
- Turn on your heater.
- Pull off the road if the temperature does not go down.
- **DO NOT OPEN RADIATOR.**



# Brake Failure: Chronic Problems

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## How will you know?

- “Chronic Failure” or Why is my car making this grinding, squealing noise when I apply the brake?
- You may also feel the car “pulling” when you try to stop.

## What does this mean?

- This means your brakes are worn and in danger of failing.
- The best way to fix this problem is to have your brakes serviced before the whole neighborhood hears you trying to stop.

**You will usually have plenty of warning to address this problem. If you can hear your brakes, GET THEM FIXED!**

# Brake Failure: Catastrophic Problem

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## How will you know?

- You will push your brake pedal, and there will be no resistance.
- You have no brake fluid.
- Brake light indicator may come on.



## What should you do?

- Stay calm.
- Turn on your hazard lights to signal that something is wrong.
- Shift your car into a lower gear to help it slow down.
- Carefully work your way over to a safe place to stop.
- Pump your brakes to try and get some pressure back into the system.

# Car Fire: Rare But Dangerous

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## How will you know?

- You will either see or smell smoke.

## What should you do?

- Immediately move to the closest safe place to stop.
- Stop the car and turn off the ignition.
- Get every person out of the car
- Don't allow anyone to go back to retrieve personal items.
- ***DO NOT OPEN THE HOOD OR TRY TO PUT OUT THE FIRE.***
- Move far from the burning vehicle to avoid the flames and toxic fumes—at least 100 feet—and also keep bystanders back.
- Call 911.



# Night Driving: Why Is It Dangerous?

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## **Fatigue**

- Over 60% of drivers admit to driving drowsy.
- More than 40% admit to having fallen asleep when driving.

## **Limited Visibility**

- A driver can only see 160-250 feet ahead with low beams and 350-500 feet ahead with high beams.
- Your depth perception, ability to distinguish color, and peripheral vision are reduced in low-light conditions.

## **Impaired Drivers**

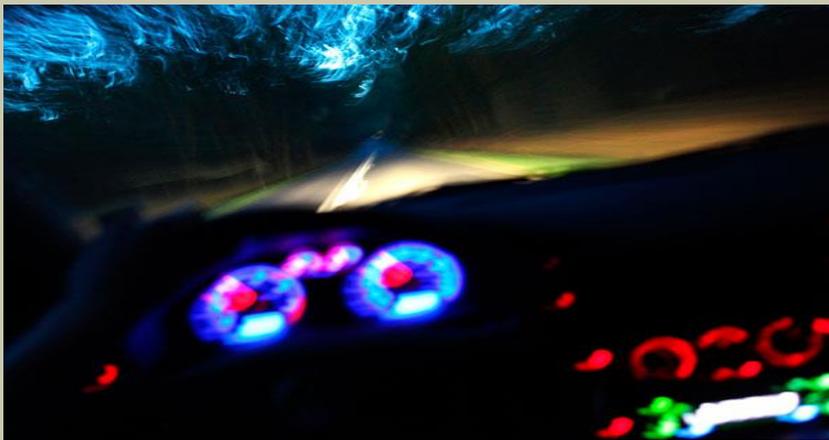
- Impaired drivers are more likely to be out after dark.

## **Traffic**

- Drivers may be rushing home during rush hour in the dark.

# Night Driving: How To Stay Safe

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# Night Driving: How To Stay Safe

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- Adjust and clean your headlights. Consult your owners manual if necessary.
- Make sure your windows and mirrors are clean.
- Dim your instrumental panel and dashboard lights.
- Look for animals' eyes on the side of the road.
- Don't stare into the lights of oncoming vehicles.

# Night Driving: How To Stay Safe

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## **Slow Down**

- Your lights only give you 180-500 feet of visibility. At 60 mph, you will need at least 300 feet to stop.

## **Be Alert**

- Watch out for drowsy or impaired drivers who may be changing lanes frequently, speeding, or not maintaining lane position.
- Watch for animals on the side of the road.
- Put away any distractions.

**Wear your seat belt.**

**Keep your eyes moving, and take frequent breaks.**

# Weather

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# Driving in Fog

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- **Why is fog dangerous?**
  - Limited visibility.
  - White, blue, silver, and black vehicles become hard to see.
- **What should a driver do?**
  - Reduce speed and allow greater following distance .
  - Make sure headlights are on low beam to reduce glare.
  - Turn on windshield wipers & defroster or air conditioner.

# Driving In The Rain

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## Why is rain dangerous?

- **According to NHTSA researchers,**
  - ✦ More than 40% percent of weather-related crashes happen during rainfall.
  - ✦ More than 70% of weather related crashes occur on wet pavement.
  - ✦ Water on the road makes it harder to stop and limits visibility.

## What should a driver do?

- Make sure your tires have enough tread.
- Slow down and maintain **MORE THAN** 3- 4 seconds following distance.
- Try to drive in the center of the road.
- Turn on low beams or running lights & windshield wipers.

# Driving In Rain: Hydroplaning

## What is hydroplaning?

- Occurs when water gets between the surface of the road and your tires.
- Your vehicle is “surfing” on top of the water.
- You may only have limited steering or braking ability.

## What should you do?

- Slow down, especially in the first few minutes of a rain.
- Stay calm, and do not panic.
- Do not slam on the brakes.
- Steer in the direction of the skid.
- Ease your foot off the accelerator.



# Driving In Rain: Flooded Roads

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**Never drive through standing water if you can avoid it.**

- **You don't know how deep it is.**
- **12 inches of water can sweep your car away**
- **Standing water can also flood and destroy your engine**
- **Standing water can also hide potholes.**

**If you must drive through standing water,**

- **Drive slowly and steadily.**
- **Do not drive in water with downed power lines**
- **If your vehicle stalls, you may need to restart the engine to make it to safety but restarting may cause irreparable damage to the engine.**

# Driving In Snow

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## Why is it dangerous?

- **Loss of traction.**
- **Difficult to steer, brake, or stop.**
- **Limited visibility.**



## What should a driver do?

- **Stay home.**
- **If you must travel, GO SLOW.**
- **Turn your headlights (your flashers on).**
- **Allow greatly increased following distance (much more than 3 -4 seconds).**
- **Make sure your vehicle is clear of snow and ice.**

Why?

Because you will have no traction.

If you must drive:

Go as slowly as possible.

Brake as slowly as possible.

Do not stop going up or down a hill.

Tap your brakes lightly to test them.



**Driving in Ice: Just Stay Home**

**DRIVING ON ICE  
IS  
EXTREMELY DANGEROUS!**

# Winter Driving

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VIDEO TO BE DISPLAYED  
DURING CLASSROOM  
INSTRUCTION.

# Legal Issues

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- **Getting stopped by the police.**
- **Receiving a citation.**
- **Getting into a crash and what to do.**



# Getting Stopped By The Police

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VIDEO TO BE DISPLAYED  
DURING CLASSROOM  
INSTRUCTION.

# What If You Get ONE Citation?

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## **If you get a citation with a learner's permit:**

- **You will have to take the Driver Improvement Program.**
- **Your nine month waiting period to get a provisional license will start again.**
- **Repeated citations can lead to suspension and revocation of your privilege.**

## **If you get a citation with a provisional license:**

- **Your eighteen month waiting period will begin again.**
- **You will have to take Driver Improvement.**
- **Repeated citations will lead to suspension and revocation of your driving privilege.**

# Suspensions & Revocations

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**If a provisional driver is under 18:**

- **the FIRST offense requires the driver to complete a driver improvement program.**
- **a SECOND offense will result in a 30-day suspension of the driver's license/privilege followed by an employment and education only restriction for a period of 90 days.**
- **a THIRD offense will result in a 180-day suspension of the driver's license/privilege, require attendance at a driver improvement program designed for young drivers, and imposition of an employment and education only restriction for a period of 180 days.**

**A FOURTH or SUBSEQUENT offense will result in the revocation of the driver's license/ privilege and will require a driver to pass all licensing tests successfully before being reinstated.**

# Crashes: How To Avoid Them

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- **Obey the speed limit.**
- **Stay focused on the driving tasks.**
- **S.E.E. all the time.**
- **Keep your vehicle maintained.**



# If A Collision Is Coming...

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## If a collision appears unavoidable:

- **Choose an off-road path.**
  - ✦ A head-on collision is the worst type of collision.
  - ✦ If possible, swerve to the right side of the road when you take evasive action.
  - ✦ Swerving to the left side of the road to avoid a collision is more apt to bring you into the path of oncoming traffic.
- **If you can, choose something that will give way.**
- **Hit an object with a glancing blow (at an angle) rather than head-on.**
- **Adjust your speed and steer so you can hit, or be hit, at or behind the rear wheels.**
- **DO NOT PANIC and maintain control of your vehicle.**

# Off-Road Recovery

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**If you go off the road accidentally or to avoid a crash,**

- Do not panic and jerk the steering wheel.
- Ease off accelerator.
- Stay off brake.
- Align vehicle with edge of road.
- Check oncoming and following traffic.
- Return to road with proper steering technique.



# Crashes: Legal Responsibilities

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**According to the Maryland Driver Manual:**

**If you are involved in a crash where someone has been injured, including a pedestrian or bicyclist, you MUST remain at the scene and**

- ✓ call 911 immediately to get help.**
- ✓ identify the number of people involved, the type of injury and the location of the crash.**
- ✓ Do not move the vehicles.**

# Crashes: Legal Responsibilities

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**If there are no injuries, but your vehicle cannot move:**

- ✓ **call 911 immediately,**
- ✓ **give the location of the crash,**
- ✓ **advise there are no injuries but you need police assistance,**
- ✓ **use your emergency flashers or flares to warn oncoming traffic, and**
- ✓ **be patient and do not attempt to cross the roadway or stop traffic.**
- ✓ **Make sure you stay away from traffic.**

# Crashes: Legal Responsibilities

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**If there are no injuries and your vehicle can move:**

- **Stop the vehicle as close as possible to the scene of the crash, without obstructing traffic more than necessary.**
- **If possible, move it off the roadway to ensure your safety and that of other motorists, and to prevent traffic backups.**
- **Exchange important information.**
- **Ask witnesses to leave their important information.**
- **Note collision location, date and time, number of vehicles involved, weather and road conditions.**
- **Note any damages and the facts of how the crash happened.**

# Crashes: Legal Responsibilities

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## **If you strike an unattended vehicle or other unattended property, you are required to:**

- stop the vehicle as close as possible to the scene of the crash, without obstructing traffic more than necessary.
- attempt to find the driver or owner of the property to notify and provide your information.
- if the driver or owner of the property cannot be found, leave notice and your information in a conspicuous, secure place.

# Crashes: Legal Responsibilities

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## When **MUST** you notify law enforcement?

- ✓ **Someone has been injured.**
- ✓ **A vehicle cannot be moved.**
- ✓ **A driver appears to be under the influence.**
- ✓ **A driver does not have a license.**
- ✓ **A driver tries to leave the scene without providing the proper information.**
- ✓ **Public property has been damaged.**
- ✓ **A driver strikes and injures a domestic animal.**

# Hit And Run?

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**You back into a mail box and don't tell the home owner.**

**You scrape another car while you're parallel parking, then quickly drive off.**

**You are backing out of your best friend's driveway and you run over the family's cat, and you say nothing.**

**You knock down a senior citizen crossing the street, and you don't stop.**

# What Is A Hit And Run Crash?

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- Any time a driver hits anything, person, property, or even a pet, and fails to stop.
- Can be a crash that causes property damage:
  - **Damage to property such as destroying mailbox or hitting a fence.**
  - **Damage to another vehicle such scraping a door or denting a bumper.**
- In these situations, a driver is required to leave notification and insurance information with the property owner if they can be found or on the vehicle/property if they cannot.

# Hit And Run Crashes

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**The most serious types of hit and run crashes involve vehicles and personal injury.**

- **If you are involved in a crash that causes serious bodily injury or one that you should have known would cause serious injury and you fail to remain at or return to the crash,**
  - ✦ **YOU WILL BE COMMITTING A MISDEMEANOR AND MAY BE SUBJECT TO 5 YEARS OF IMPRISONMENT AND/OR A \$5000.00 FINE.**
- **If you are involved in a crash and you knew or should have known that the crash might result in death and you fail to remain at or return to the crash,**
  - ✦ **YOU WILL BE COMMITTING A FELONY AND CAN FACE UP TO 10 YEARS IMPRISONMENT AND/OR \$10,000 FINE.**

# What Are A Driver's Responsibilities?

44

A driver is required to

- ✓ **Return to or remain at the scene of a crash when he/she knew or should have known that serious bodily injury could result.**
- ✓ **Call for emergency assistance, and remain at the scene of the crash until that assistance remains.**
- ✓ **Assist the victim if possible.**
- ✓ **Provide law enforcement with all pertinent information.**

# Why Leave The Scene Of A Crash ?

45

- **Panic**
- **Shock**
- **May have been drinking or using illegal drugs**
- **No insurance**
- **Driving on a suspended or revoked license**

**A hit and run conviction is worse than any of these. Remember, if you seriously injure someone, it is a crime that carries a maximum 5 year jail sentence.**

# How Serious A Problem Are Hit And Run Crashes?

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- In 2011, there was a 13.7% increase in fatal hit and run crashes while overall traffic fatalities have declined.
- Between 2010 – 2012, there were over 3,000 hit and run injuries in Anne Arundel, Baltimore City, Baltimore, Harford, and Howard counties specifically .



# Review Of Unit 8

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- 1) What are some examples of mechanical failures? What is the best way to avoid mechanical issues with your vehicle?**
- 2) In any kind of bad weather, what is the first thing a driver should do?**
- 3) What should a driver do if he/she is stopped by law enforcement?**
- 4) What happens when a driver with a learner's permit or a provisional license is given a citation? Or receives multiple citations?**
- 5) If you cannot avoid a crash, what should you do?**
- 6) What information must a driver leave if he/she hits an unattended vehicle?**
- 7) When must a driver notify law enforcement of a crash?**
- 8) What is a hit and run crash and what are the penalties?**

# END OF UNIT EIGHT