

Training Package

10/12

# Safe Driving in Bad Weather Conditions



## Acknowledgement

This document is adopted from the European Industrial Gases Association document TP N° 28/12 – Safe Driving in bad weather conditions.

## Disclaimer

All publications of AIGA or bearing AIGA's name contain information, including Codes of Practice, safety procedures and other technical information that were obtained from sources believed by AIGA to be reliable and/or based on technical information and experience currently available from members of AIGA and others at the date of the publication. As such, we do not make any representation or warranty nor accept any liability as to the accuracy, completeness or correctness of the information contained in these publications.

While AIGA recommends that its members refer to or use its publications, such reference to or use thereof by its members or third parties is purely voluntary and not binding.

AIGA or its members make no guarantee of the results and assume no liability or responsibility in connection with the reference to or use of information or suggestions contained in AIGA's publications.

AIGA has no control whatsoever as regards, performance or non performance, misinterpretation, proper or improper use of any information or suggestions contained in AIGA's publications by any person or entity (including AIGA members) and AIGA expressly disclaims any liability in connection thereto.

AIGA's publications are subject to periodic review and users are cautioned to obtain the latest edition.

© Reproduced with permission from European Industrial Gases Association. All rights reserved.

***Asia Industrial Gases Association***

# Safe Driving in Bad Weather Conditions



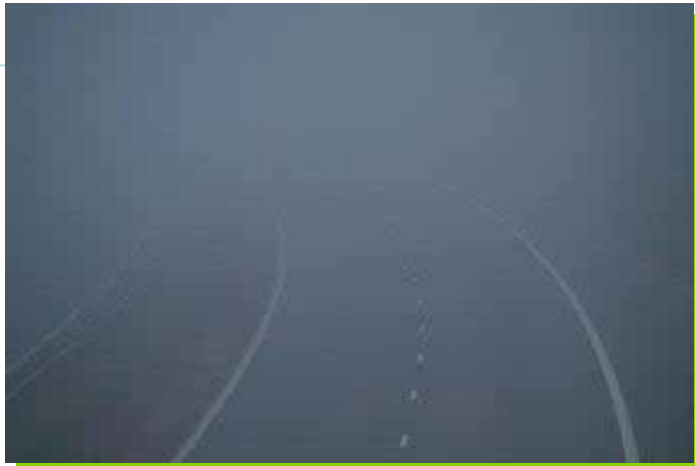
- Adverse weather conditions significantly increase the risks to drivers. The better prepared you are to confront the hazards associated with bad weather, the more likely you will be able to avoid hazardous driving situations.



# Safe Driving in Bad Weather Conditions



➤ *CAN YOU SEE THE DIFFERENCE?*



# Safe Driving in Bad Weather Conditions



Upon completing the module, drivers will be able to:

- Understand the reaction of the vehicle in various weather conditions;
- Apply safe driving procedures and adjust their driving to suit the adverse conditions.

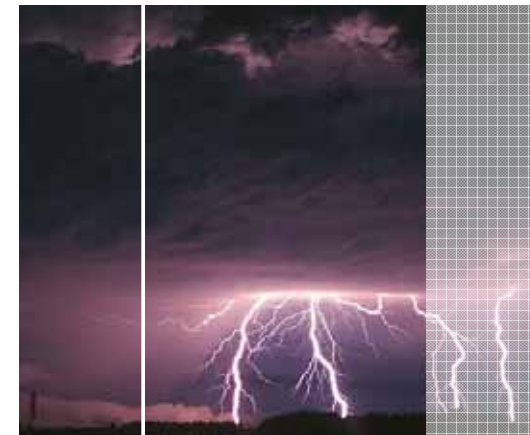




# Safe Driving in Bad Weather Conditions



- Bad weather conditions make every driving decision even more critical.
- When visibility and traction is reduced, the chances of an incident is greatly increased.



## Rain



Hazards associated of driving in rain include:

- slippery road surfaces
- increased risk of slipping if the road surface is covered with leaves etc
- flooding
- reduced visibility and
- aquaplaning.



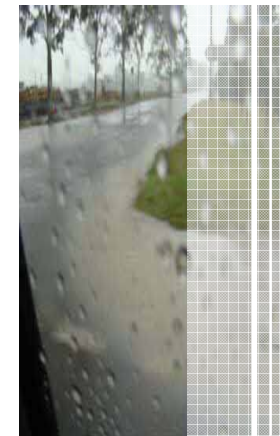


# Rain



The following guidelines help reduce the risk of driving in rain:

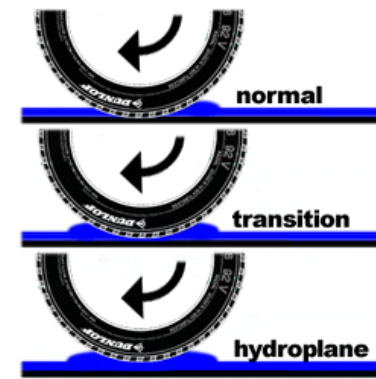
- Rain can cut your visibility down to 30 m (100 ft.) or more and therefore the speed to ensure adequate stopping distance should be no more than 30 km/h.
- Make sure that the wipers and wash bottle are clean and in good working condition.
- Avoid sudden turns or lane changes.
- Increase your following distance.
- During periods of heavy rain you may need to exit the highway and find a safe place to park till it abates.
- Leave your vehicle if it stalls in flood conditions.



# Rain



- Aquaplaning (hydroplaning) can occur on wet roads when tyres lose contact with the road surface and ride on a sheet of water.
- To regain contact with the road, take your foot off the accelerator. As the vehicle slows down, the tyres will deflect the water and allow better traction.
- Aquaplaning is caused by several characteristics:
  - (i) the water depth
  - (ii) speed and weight of the vehicle
  - (iii) tread depth & pattern.



# Rain



To reduce the risk of aquaplaning on wet surfaces:

- check tyre pressure and tyre tread regularly;
- replace worn or balding tyres;
- inflate tyres to recommended pressure;
- rotate tyres regularly;
- steer around puddles, if possible;
- avoid roads prone to flooding; and
- drive slowly.

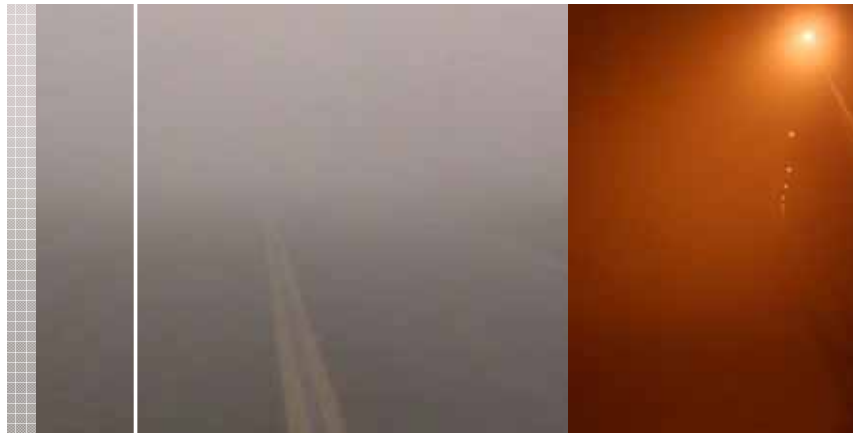


# Fog



The dangers of fog include:

- Reduced visibility
- Wet and slippery road conditions.



# Fog



When driving through fog, follow these safety guidelines:

- Gradually reduce your speed.
- Switch on the dipped beam headlights (and fog lights if available) as you enter the foggy area, do not drive with the high beam on as they direct light up into the fog, making it difficult for you to see.
- Always use your wipers and demisters, sometimes other drivers never switch on their lights.
- Signal all turns well in advance.

... / continued



## Fog



- Brake early to warn drivers behind you.
- Be prepared to stop and use your foot brake gently as the blinking from the lights will give some indicator to warn the drivers behind.
- Never try to pass another vehicle.
- Move to the inside lane and slow down in order to allow other drivers to pass.
- Always observe the surrounding area, check your mirrors and reduce speed, do not brake harshly.





# Freezing Point



When rain and lower temperature combines, black ice can form on the road. You cannot see black ice on the road surface and therefore it is one of the most dangerous situations you can face when driving as it can lead to unexpected loss of vehicle control.

Warning signals for black ice conditions include:

- Touch the front of the side mirror to see if ice is forming.
- Watch if there is no water spray from the wheel in front as this indicates ice.
- Be careful when crossing bridges as ice will often form on them first.



# Snow



Guidelines when driving in snow include the following:

- Make sure that the tyres are good for roads with snow.
- Some states or countries require the use of chains, so make sure that you know how to use them. Improper use will damage the brakes and tyres.
- Reduce your speed by at least 1/3. For example, if you drive at 90 km/h (56 mph) on a dry road, reduce to 60 km/h (37 mph) in snow conditions.



## Flooded



- It is very difficult to judge the difference between wet and flooded roads, especially at night.
- Follow the road signs, look at the topography and the contours of road and fences/guardrails.
- Be vigilant with any irregularities in road surface in wet conditions.





# Landslips



- Landslip Warnings identify those areas where there may be the occurrence of frequent and isolated landslips.
- Landslip cannot always be accurately predicted and may occur in other areas in less severe rainfall.
- When a Landslip Warning is in force:
  - Rearrange your trip, stay at home or in a safe shelter until warning ceases.
  - Avoid driving in hilly areas or on roads with landslip warning signs.



# Sun Glare



The bright light associated with sun glare can dazzle you and affect your vision.

Safety guidelines include:

- Using the sun visors in your vehicle and wearing sunglasses to combat glare when the sun is low on the horizon - this will also reduce eye fatigue (although sunglasses should not be worn in low light or at night).
- Turn on your headlights as soon as the sun starts to set. Your headlights may not enhance your vision at this time but will greatly increase the visibility of your vehicle to other drivers.



## Strong Winds



Strong crosswinds can affect vehicle stability, particularly at higher speeds.

- Always hold the steering wheel when driving so you will be able to steer against them.
- Crosswinds may be stronger or more likely on bridges, exiting tunnels and when leaving areas sheltered by noise-protection walls or buildings.
- During storms with high winds there is also the chance of flying objects such as broken-down branches, advertising boards, litter or other debris.





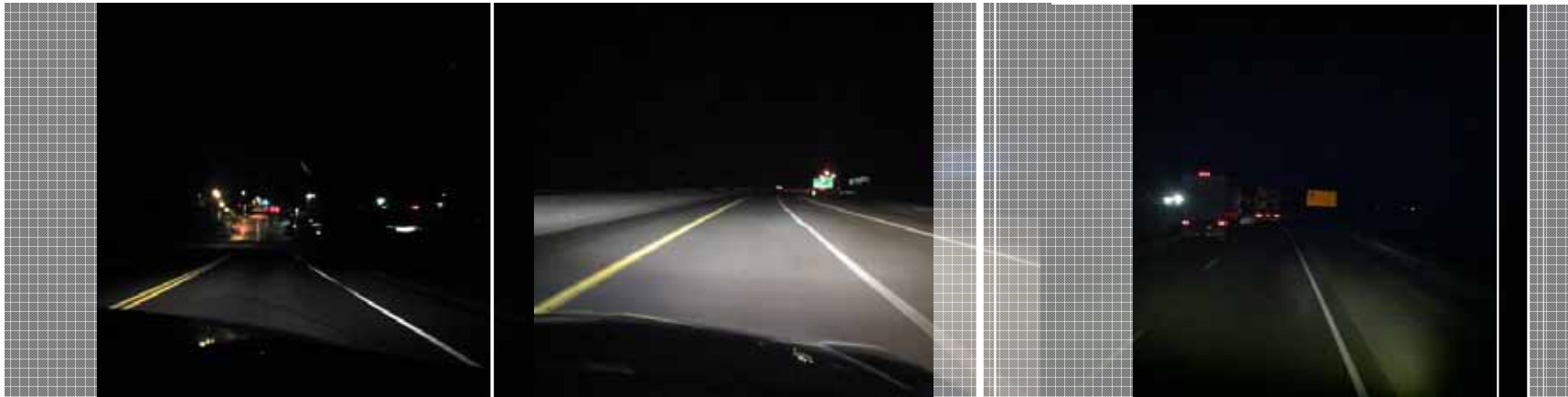
# Night Driving



More vehicle accidents occur at night.

The dangers of night driving include:

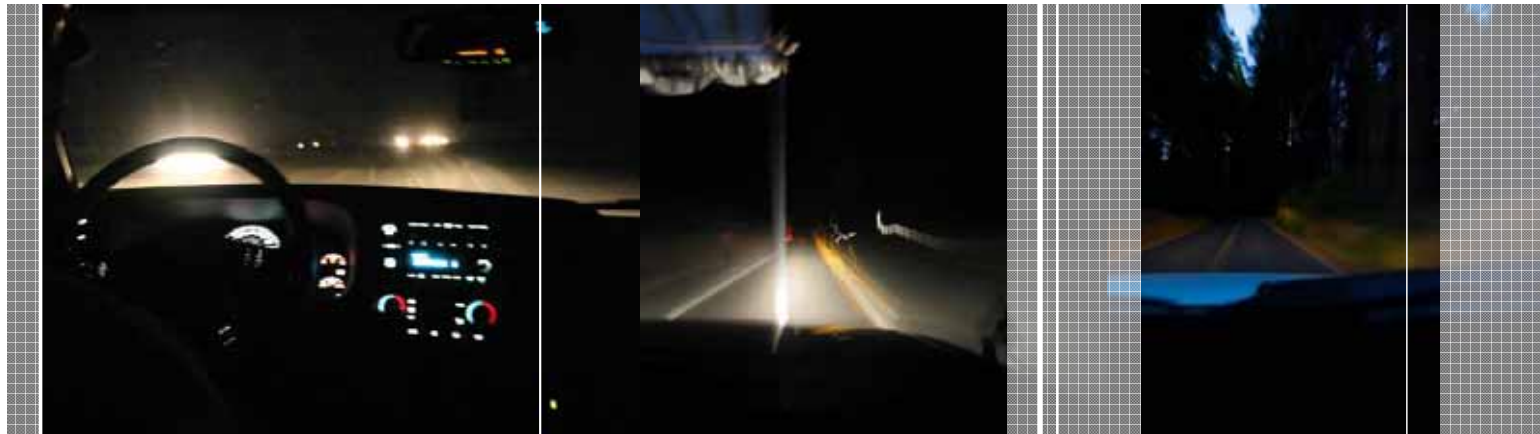
- Reduced visibility
- Peripheral vision is not as sharp
- Darkness impairs your ability to judge distances, movements, and colors
- Fatigue.



# Night Driving



- Before starting to drive at night, give your eyes an extra five minutes to adjust to the dark.
- Slow down and leave at least 4 seconds (in normal conditions) between your vehicle and the vehicle ahead of you.
- Do not look directly at the high beams of an approaching vehicle;
  - Keep looking forward and momentarily shift your focus to the white line on the side of the road as a guide.
- If you are feeling drowsy, pull off the road to a safe area and rest.



## Night Driving



- Flip your rear view mirror to the NIGHT position in order to reduce glare from headlights of vehicles behind you.
- On rural roads use your high beam headlights except when within 150 m (500 ft.) of another vehicle that you are either overtaking or passing in the opposite direction;
  - This will extend your forward vision and allow extra time to react in case other road hazards are present (e.g. wildlife).
- When you use low beam headlights, slowdown to a speed that will allow you to stop in the distance that you can see ahead.



## Summary



- Knowing the hazards associated with different weather conditions helps you to adapt your driving to the different road conditions.
- Speed should be reduced whenever road conditions get worse.
- When driving in the rain, be sure to adjust your speed accordingly.
- Make sure you regularly inspect your wipers and wash bottle to ensure they are in good condition.
- Be alert to black ice, stagnant water etc.
- Be very careful on bridges and overpasses.
- Bad weather can greatly reduce visibility.
- Reduce the speed and be ready to react.

**Thank you**

