

EFFECTS OF DRIVER CONDITION

Chapter 14

14.1 Emotions and Driving

14.2 Physical Senses and Driving

14.3 Physical Disabilities

Study: Miami's vice is rude motorists

If you value highway courtesy, try Minneapolis or St. Louis, a survey says.

By **BETH RUCKER**
ASSOCIATED PRESS

Stressed Miami drivers speed, tailgate and cut off other drivers so frequently that the city was named worst in terms of road rage in a survey released Tuesday.

AutoVantage, an auto club offering travel services and roadside assistance, also listed Phoenix, New York, Los Angeles and Boston in the top five cities for rude driving.

Minneapolis, Nashville, St. Louis, Seattle and Atlanta were rated as the cities with

the most courteous drivers, who were less likely to change lanes without signaling or swear at other motorists.

More than 2,000 regular commuters in 20 major metro areas were asked to rate road rage and rude driving in telephone surveys between January and March. The survey conducted by Prince Market Research has an error margin of 2.2 percentage points.

Drivers owned up to some rude behavior themselves: Nearly all said they had talked on a cell phone while driving, and 64 percent acknowledged driving too fast occasionally.

Young drivers and people with long commutes were found to be the most likely

to react to an aggressive or rude driver. The top reactions included honking the horn, cursing and making an obscene gesture.

No distinct differences were found between male and female drivers.

"Human behavior is so involved with crashes at all levels," said Elly Martin of the National Highway Traffic Safety Administration. "(Aggressive driving) is a pattern of behavior drivers exhibit over and over."

AutoVantage hopes to use the survey to educate people about how to resist road rage. Among its tips are remaining calm and not making eye contact with an angry driver.

Anger



Emotions



Joy



Fear



Affect your thoughts
and actions

A driver can minimize the
effects of emotions by using
courteous driving strategies

Can lead you to
accept more or
less risk than
normal for the
gain you receive

How Emotions Affect Driving

Change the way
you normally
assess risk and
make driving
decisions

Emotions can be infectious-
They can affect others in
your car and other around
you

Using courtesy to influence the effects of
emotions on others empowers you



Mental Effects of Emotions



Strong emotions can interfere with your ability to think, reason, and make wise decisions

Can increase your chances of making a mistake

Can affect the way you make judgments in a driving situation

A strong emotion can cause you to focus your attention on one event, you might miss other important events in the driving scene



*Strong Emotions can cause changes
in your bodily functions*

*Your body will prepare itself
for a stressful event*

Physical Effects of Emotions

Heartbeat increases

Breathing quickens

Digestion slows

Muscles tighten



Anger While Driving

Anger ranges from mild irritation to furious rage and can result in aggressive actions or even violent acts of “Road Rage”

You might be tempted to react angrily when you must change your expectations

Anger occurs more often to drivers than any other emotion.



Anger can impair all of your driving skills. You might take risks you would not take if you were calm.

You usually rely upon a set of assumptions or expectations when driving. You assume that others will drive and act in a safe, responsible manner.

ANGER

- Most common are anger and frustration
- Drivers must learn to control anger
- Angry drivers tend to speed, tailgate, pass in illegal situations, and run lights or traffic signs.



Other Emotions and Driving

Sorrow, Depression, and Anxiety are other emotions that can adversely affect driving

These emotions can also slow body processes and reduce mental alertness

Anxiety different than Anger

Excitement and happiness also can prevent you from fully concentration on your driving task

A happy, excited driver can be just as impaired as an angry driver





Los Angeles
Salt Lake City
Casino Ctr Blvd

Las Vegas Strip
NEXT EXIT

515 93 95 SOUTH
Phoenix
Downtown LV

5 93 NORTH
Salt Lake City
3/4 MILE

EXIT 76B
15 SOUTH
Los Angeles

ROAD
CONST.
I-15N



Emotions and the IPDE Process

**In tight, high stress situations,
you need even more time to
use the IPDE Process to keep
from making wrong or late
decisions**

**Your emotional condition can
drastically affect your driving
ability**

Effects on Risk Taking



Emotions have a big influence on the amount of risk you are willing to take

Mature, responsible drivers do not let their emotions make them take unnecessary risks

You must be mature enough to adjust your behavior so that you do not drive into or create high-risk situations.

Controlling Emotions



Coping with Emotions

- Use IPDE Process to drive in an organized manner. Learn and use correct driving procedures until they become habits. You then will be more likely to execute the proper action, even under emotional stress.
- Anticipate emotion-producing situations, and adjust expectations.
- If you encounter an aggressive driver adopt a “yield” attitude.
- Adjust your route to avoid irritating traffic situations.
- A tired person can become upset more easily.
- Learn from mistakes. Do not repeat them.
- Keep COURTESY as one of your personal rules of the road.

If you experience a strong emotion while driving you may want to:



- Let someone else drive
- Take another form of transportation
- Wait
- Take an alternate, low traffic route

PHYSICAL SENSES AND DRIVING



- 1. Seeing: 90% of information gathered**
- 2. Visual Acuity: Ability to see things clearly**
 - **Written as a ratio**
 - **20/20 vision**
 - **Pass vision test**
 - **20/40 vision required**
 - **Have to wear glasses or contacts to drive**
- 3. Color Vision: Ability to distinguish one color from another**

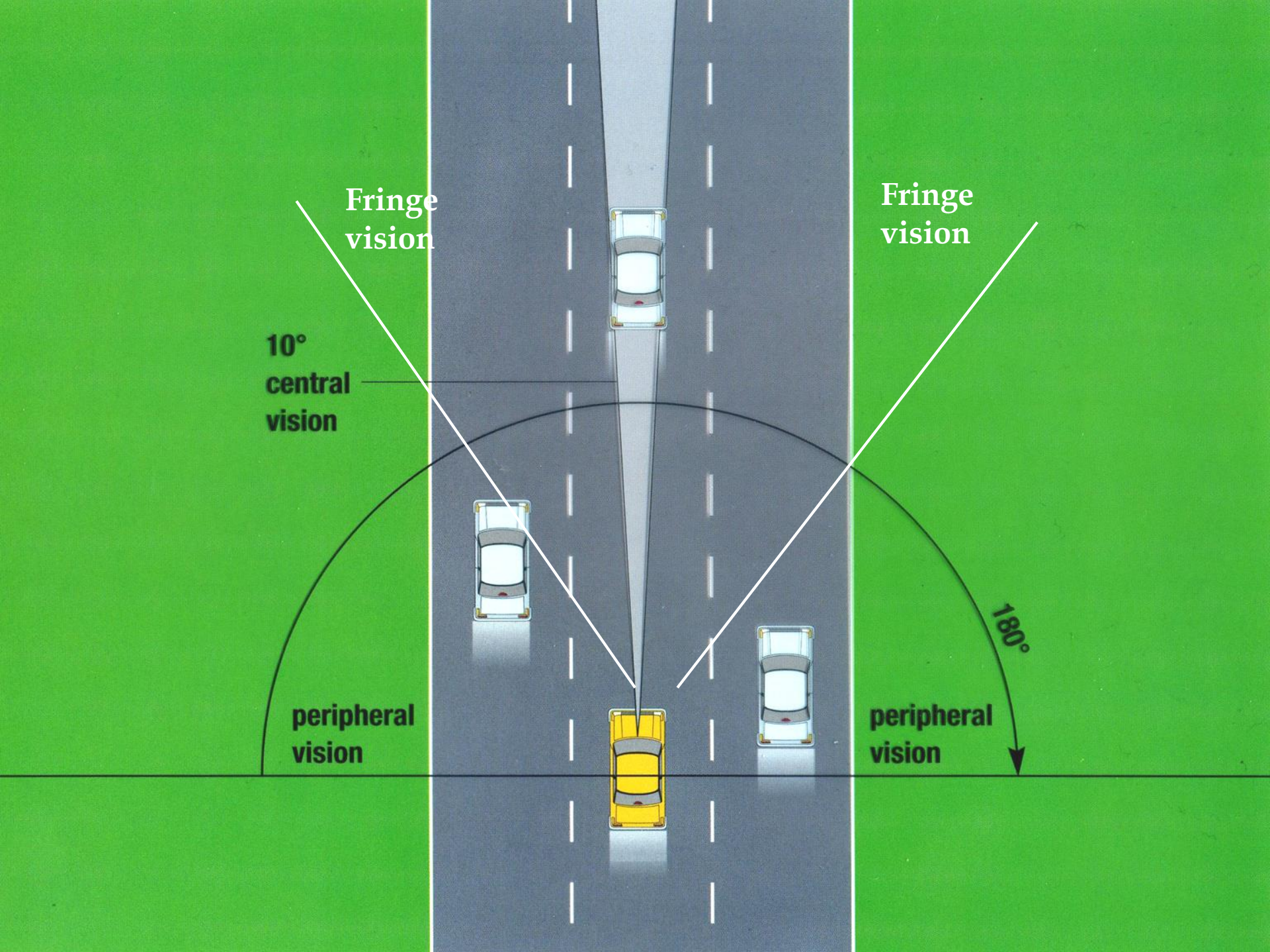
PHYSICAL SENSES AND DRIVING CONT.

4. Continued: Compensating color blindness:

- Remembering order of lights in a traffic signal
- Knowing meanings of traffic signals by their shapes
- Reading all signs that appear with traffic signals

5. Field of Vision: Area that you can see around you when you are looking straight ahead. Most can see 90 degrees to each side.





Fringe vision

Fringe vision

10°
central
vision

peripheral
vision

peripheral
vision

180°

PHYSICAL SENSES AND DRIVING CONT.

Night Vision

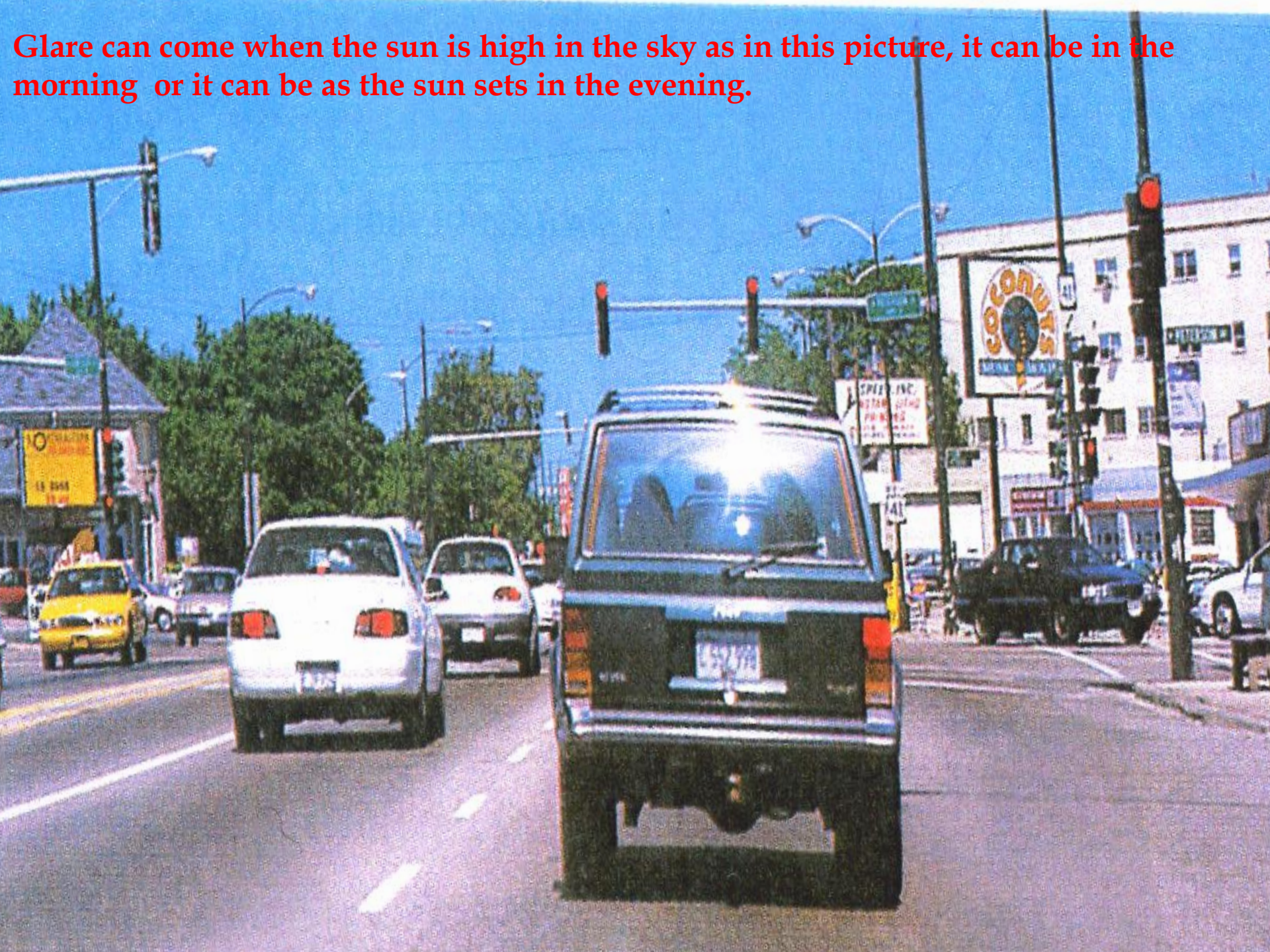
Night Blindness - Not being able to see as well at night

Glare

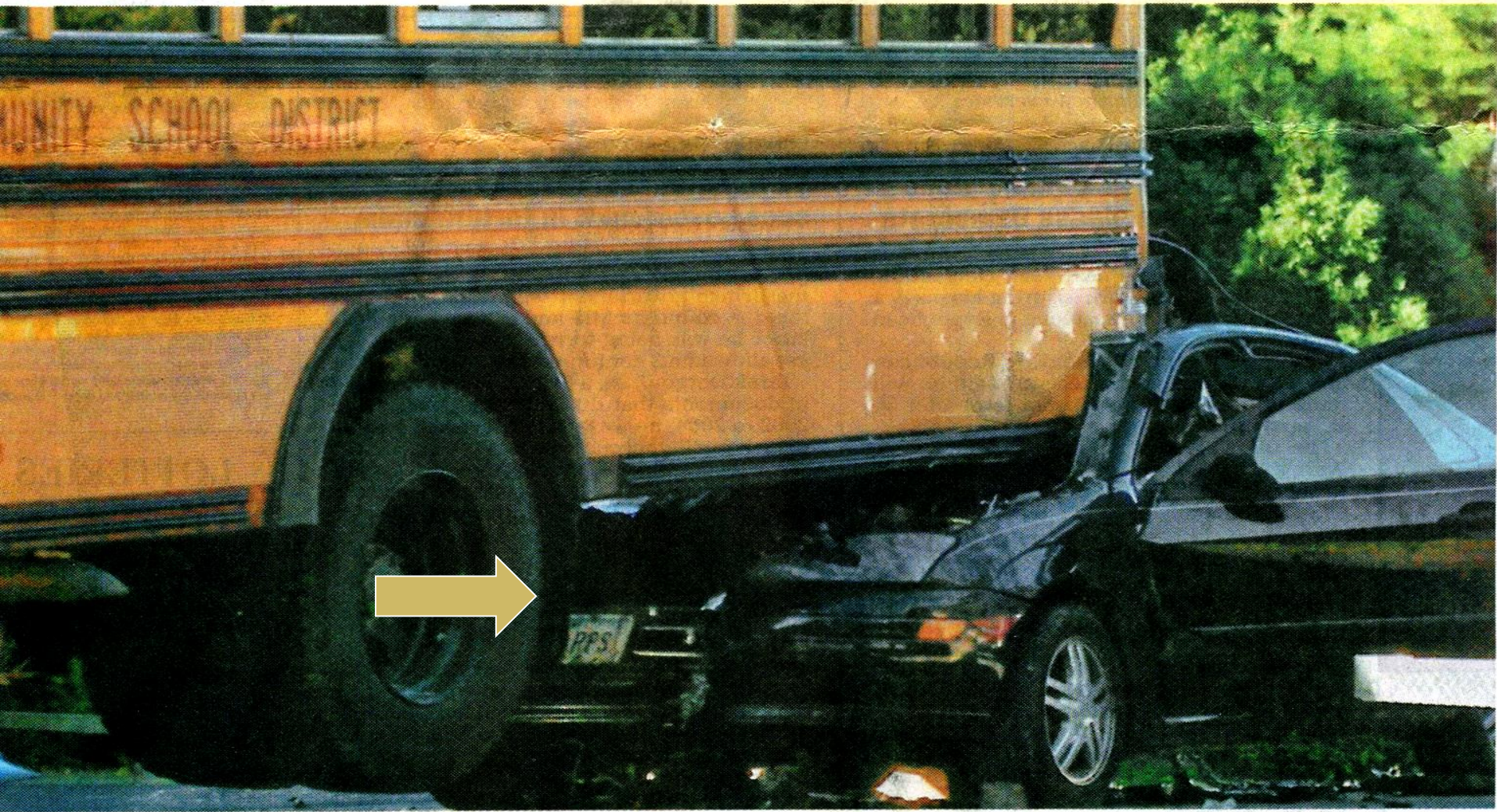
Steps to avoid or recover from glare.

1. Avoid looking directly at the lights. Use the edge of the road as a guide.
2. Anticipate glare situations and look away or squint.
3. If impaired by glare, slow until vision clears.
4. Use sun visor and sunglasses.
5. Adjust rearview mirror for night use.

Glare can come when the sun is high in the sky as in this picture, it can be in the morning or it can be as the sun sets in the evening.



CAR RAMS STOPPED BUS



BRAD REINERS/FOR THE REGISTER

A car driven by a 17-year-old girl struck a stopped school bus west of Muscatine on Wednesday morning. Muscatine sheriff's officials, who expect to release the driver's name today, said early-morning sunlight may have been a factor in the crash. The Muscatine Community Schools bus was picking up children at the time of the accident, authorities said. The bus driver and the four students on the bus were taken to a local hospital, and the driver of the car was airlifted to University of Iowa Hospitals in Iowa City.

DES MOINES

Muscatine

OTHER SENSES AND DRIVING

1. Hearing
2. Smell
3. Sense of Motion



Risk Management

Your physical senses affect your perceptions of the risk involved in each driving situation.

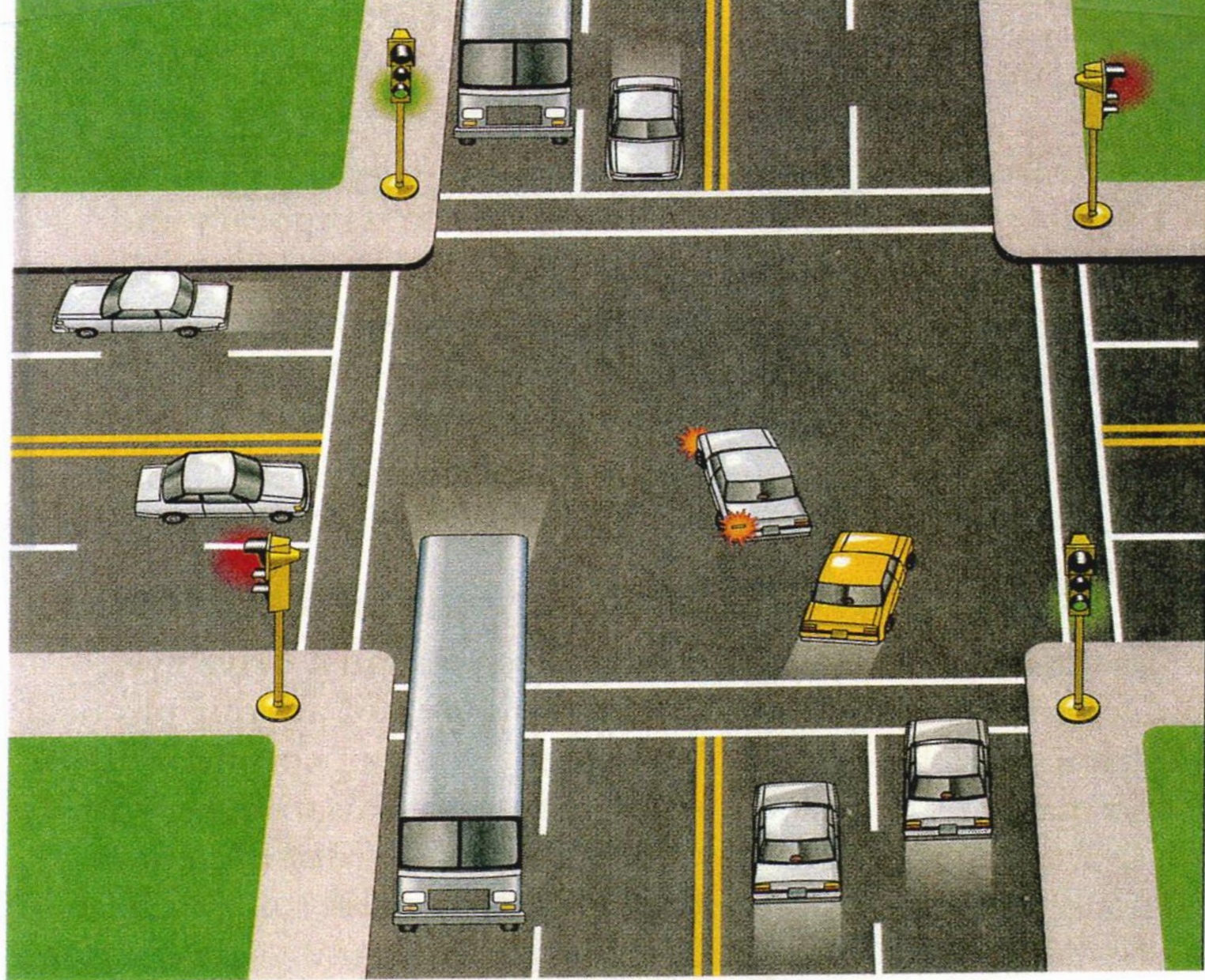
If vision is blocked, you might inaccurately judge the risk of a driving situation



High-Risk Situations

Risk is increased when more than one task must be performed at the same time

It is more difficult to use senses in multitask situations



The driver of the yellow car has created a high-risk situation. By pulling around the car making a left turn, the driver of the yellow car risks causing a collision.

PHYSICAL DISABILITIES

Fatigue:

- 1. Lessens your fitness to perform task**
- 2. Can cause drowsiness**
 - Trouble keeping head up**
 - Drifting between lane positions**
 - Wondering disconnected thoughts**



PHYSICAL DISABILITIES, CONTINUED

3. Compensate for fatigue

1. Rest before you start
2. Change drivers often
3. Stop every 2 hours
4. Wear sunglasses in bright light and snow
5. Uses orderly search patterns
6. Be active
7. Stop if you feel drowsy



Older drivers

1. 1 in 6 drivers are over 65.