

# Night Blindness

## Toolbox Talk



You may experience situational night blindness when you are temporarily blinded by a bright light such as an oncoming car's headlights. But night blindness may also be due to a health condition that causes poor vision in dim light.

When you are momentarily blinded by a bright light, your pupils contract and adjust to the sudden light intensification. But because the increased light level is fleeting, your pupils then readjust to the subsequent lower light level by dilating. During the brief time your eyes are making these adjustments, your vision is impaired.

During the day, about 85 percent of the information we need to drive is visual, but at night, this changes. Without enough light, we lose much of our contrast sensitivity (the ability to distinguish objects from the background) and peripheral vision (the ability to recognize objects at the edges of our visual field).

These challenges of nighttime driving can be exacerbated by nyctalopia – also called night blindness – a medical condition that can make driving at night difficult or impossible. Your doctor can examine your eyes to approve you to drive and to determine whether your night blindness is treatable. The doctor may ask about your diet, medications, recent injuries, family history of diabetes, and stress levels.

Treatable causes of this type of night blindness include nearsightedness, cataracts, and vitamin A deficiency. Non-treatable causes include birth defects and retinitis pigmentosa, an eye disease that damages the retina.

No matter the cause(s) of night blindness, the following tips can help you navigate nighttime driving:

### Do:

- Drive within the visual range illuminated by your headlights, not by what you think you see beyond them. At night, headlights limit our view to only 250 to 350 feet of the road ahead.
- Adjust your rearview mirror to the nighttime setting to dim any headlight glare coming from behind. When the glare is gone, readjust to the daytime setting.
- Using the solid line as a guide, focus your eyes on the right edge of the pavement to avoid being blinded by oncoming headlights.
- Clean your headlights.
- Clean your windshield inside and out.
- Shift your view between the road and your rear and side mirrors.
- Use high beams when you can.
- Remove your sunglasses at dusk.
- If you wear prescription glasses to drive, choose frames with thin sidepieces that don't hinder vision.
- Turn your head from side to side to increase the peripheral vision that decreases at night.
- Dim your instrument lights.

### Don't:

- Drive faster than conditions allow. Consider winding roads, rain, snow, fog, heavy traffic, and construction zones. You need extra time at night to spot and react to hazards. At 60 mph, a car can cover 350 feet in 4 seconds.
- Put dark, aftermarket tinting film on windows or windshields.
- Depend on fog or parking lights when driving at dusk or dawn.
- Keep your high beams on when another vehicle approaches.
- Keep your car's interior lights on while driving.
- Wear sunglasses at night.
- Stare into your sideview mirrors as cars pass from behind.
- Use medication that may alter your night vision or make you drowsy.

