Your Brain in the Fast Lane

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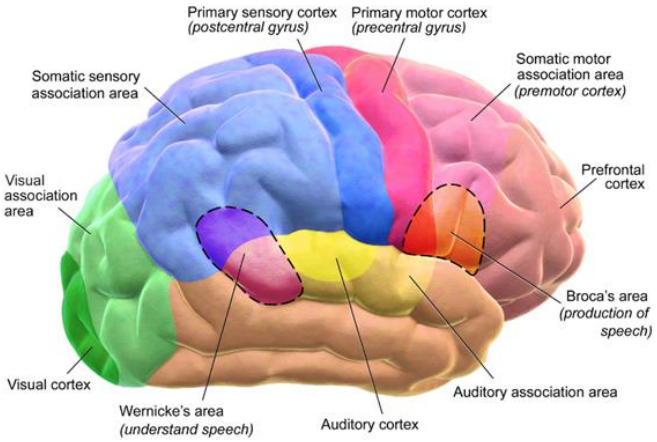
Although slips, falls, and back and shoulder injuries are the predominant cause of injuries among school personnel, the greatest risk of serious injury is driving when on the job and to and from work. One third of all on-the-job fatalities in United States involve motor vehicles. Just under 40,000 people lost their lives in 2016 to vehicle collisions when non-work numbers are included.

Neuroscientists have identified five brain-centered hazards that, when understood, can make driving safer. Review these hazards and recognize them when you are driving.

1. *Expectations bias* - Studies estimate up to 130 decisions are made each mile we drive. The brain sets expectations of what should be so it can make decisions quickly and our brains instruct our eyes to confirm those expectations. This is why we may not react quickly enough when the unexpected happens. This can be overcome by proactively scanning your surroundings to improve situational awareness. This will allow you to perceive and react to new hazards faster.

2. *Micro sleeping* –MRIs of the brain indicate less than 5 hours of sleep makes us as much as 490 times more likely to be involved in a vehicle collision. Consistent R.E.M. sleep is required nightly for the brain to maintain full functionality. Turning up music, drinking coffee and rolling windows down is not an adequate replacement. When your brain does not get enough R.E.M., sleep it periodically micro-sleeps. Your eyes are open but your brain is napping. Get consistent sleep.

3. *Autopilot driving* - We have all had this sensation before; driving several miles and not remembering much of any of it. Driving on autopilot is the brain's way of conserving energy as it does other routine tasks. This can have serious consequences. Try driving one perfect mile after the previous one. This will put conscious attention into your drive each time you get behind the wheel.



4. *The big picture* - Our eyes focus on a three-degree cone of central vision, a relatively small field. Being aware of this, start scanning your field of vision more completely and routinely as a safe driving habit. Again, scanning to improve your situational awareness.

5. *Distracted driving* - Visual, manual and mental distractions burn cognitive energy that is better used to concentrate on driving safely. Research indicates our brains cannot do two cognitive-heavy tasks simultaneously.