York County HEALTH & WELLNESS NATIONAL DRUNK/DRUGGED DRIVING AWARENESS - DEC. 2016 / JAN. 2017

"It's a bit of a paradox really," Bilotti added. "Because what happens is the alcohol disinhibits someone, so they're more likely to take risks, and impairs their judgment so they can't recognize that they are actually impaired."

Bilotti said this is a big contributor to why drivers still take to the road after they've had a few too many drinks, and paired with the loss of coordination, delayed reaction time and weakened alertness level, accidents are inevitable as the driver operates the vehicle in a sedated state.

MARIJUANA

Marijuana reacts similarly to alcohol, as a driver's reaction time is often slowed and they are "unable to respond quickly to a real or perceived threat," Bilotti said. Aside from that, marijuana also has a way of disrupting a driver's perception of time and distance.

"Marijuana ultimately inhibits concentration, and additionally it impairs people's time and distance perception," Bilotti said. "And that directly applies to driving in terms of being able to respond to feedback cues and the environment around you, and maintaining your speed."

An even bigger danger, Bilotti said, is when both alcohol and marijuana are combined, causing further, severe impairment of one's reaction time, coordination and awareness level.

OPIATES

With opiates, Bilotti said, the affects on driving closely resemble those of alcohol and marijuana, but on a much larger scale.

"With heroin and opiates in general you can have severe drowsiness, impaired memory and concentration. You can even have visual changes where the driver is unable to read signs or read instructions and understand them, causing the driver to miss these signs that direct them from dangers on the road."

Bilotti reiterated that combining opiates with either alcohol or marijuana is a sure way to find oneself in a fatal situation.

"Again there's this additive effect when these drugs are taken together," Bilotti stated. "Worst case scenario is you take opiates and drink alcohol or opiates and a sedative. The effects and level of impairment are significantly increased, and then you find yourself in real trouble."

Substance abuse while driving: a growing concern

t is commonly understood that driving under the influence of alcohol can be a bad decision, depending on the amount and rate of alcohol consumed. But there is a growing appreciation for the impact of other drugs, both illicit and prescription, on driving. This is being referred to as "drugged driving."

Which drug is the mostly frequently involved in "drugged driving?" Recent findings indicate that second to alcohol, marijuana is the substance most often detected in the blood of drivers involved in automobile crashes. It should be noted that substances are often taken together, which makes distinguishing the effects of each specific substance extremely difficult.

Driving can be affected in various ways depending on which substance, or substances, have been ingested. For example, central nervous system, or CNS, depressants, such as alcohol or prescription benzodiazepines, may slow reaction time. In contrast, CNS stimulants, such as cocaine or amphetamines, may lead to aggressive driving or the inability to remain a calm driver. Many, if not most, drivers would agree that remaining calm while driving is a valuable skill to possess.

What about marijuana? It causes various effects depending on many factors. In brief, it has been shown that marijuana can increase lane weaving, result in poor reaction time, and can alter attention. Furthermore, marijuana and other substances are often used together, which further complicates driving related impairments. What leads to some of the unpredictability associated with drug use and driving impairment? First, there are wide variability in the way in which the human body handles certain substances. For example, depending on quantity and frequency of use, marijuana can be detected in the body for days to weeks following last use. In contrast, alcohol is eliminated relatively quickly and reliably from the body. That is why law enforcement can use standardized tables, containing blood alcohol concentrations , or BAC, and weight information, to reliably predict how many drinks an individual has recently consumed. To further complicate matters, it is difficult to correlate blood concentrations of certain drugs with observable effects in drivers. This makes it very difficult to determine at which specific drug level a person should demonstrate signs of impairment. Again, compare this to alcohol for which we can consistently predict observable behaviors



Christian J. Teter, Pharm.D., BCPP

and impairment among drivers, given their BAC information. This also explains the standard cut-offs for alcohol related OUIs (e.g., 0.08 percent), which are widely available across the United States (i.e., per se laws).

The manner in which individuals take marijuana is very diverse (e.g., smoking, vaporizing, edibles), which also impacts the observable effects on drivers. For example, the effects of smoked marijuana appear quicker in onset (and offset) as compared to those of edible forms, which may be delayed and longer lasting. All of these considerations confuse matters in terms of marijuana drugged driving.

There is also the question of who is most likely to "drug and drive." It appears that, similar to many other substance use behaviors, men ages 18 to 25 are most likely to report that they have driven while drugged. One well-known study demonstrated that more high school seniors reported driving after marijuana use as compared to alcohol use. It should be noted, however, there have been noticeable increases in older adults (50 years of age and older) being involved in drugged driving crashes. This might be partially explained by an overall increase in illicit drug use prevalence rates among this age group. Given the recent increases in states allowing medical marijuana and recreational use, these issues need to be addressed and the questions answered. Currently, we simply do not know enough in regards to properly managing marijuana and driving. What can be done in the meantime? In the case of frequently used substances, such as marijuana, we clearly need to determine blood levels associated with impaired driving. At the least, it would be beneficial to identify a substance specific "cut-off" level, above which could be

larly, given the typical polydrug use pattern that can complicate the identification of impairment. The good news is that steps have been taken in this regard. AAA (exchange.AAA. com) offers a great deal of information online and describes various programs, such as drug evaluation and classification program training. These programs build on what is known as the Standard Field Sobriety Test, which is most well known for alcohol related traffic violations. These are important steps to be taken in the fight against drugged driving, but we need to learn more.

What about standardization of drug concentrations, similar to alcohol? Alcohol is typically labeled with both the total volume and alcohol concentration contained within a given unit. This can help predict observable effects in the user; in other words, we can identify "how much" substance was used. This is not always the case for marijuana, which may have vastly different drug concentrations among products.

At least with prescription medications, we are dealing with standardized dosages and a health care system that is educated regarding their effects. Of course, when these prescription medications are misused, the situation becomes much more complicated. Individuals may use higher than recommended doses or intentionally mix the medications with other substances. The situation with marijuana is more complex from the start because marijuana dosages are not standardized and because marijuana has not undergone rigorous efficacy and safety trials that are required of FDA-approved medications. The issue of drugged driving is a growing concern that we must address. At this point in time, we simply do not have all the answers we need. This is particularly true of marijuana and its potential impact on driving impairments. As more states legalize recreational marijuana, more research is needed in order to effectively monitor and manage use of the drug. *— Christian J. Teter,* Pharm.D., BCPP is an associate professor of psychopharmacology at the University of New England, College of Pharmacy.

Drunk and drugged driving

How it affects you behind the wheel

By RYDER SCHUMACHER

For many who drive everyday — or have for some time — driving is second nature. We don't think about how we are able to drive, it's instinctual, and comes easy after the turn of the ignition key (or nowadays push of a button.) But as Dr. Edward Bilotti of Southern Maine Health Care in Biddeford says, there are complex happenings going on inside our heads when we operate a motor vehicle.

"We take driving for granted as something we do with ease. We don't think about it, but when we're driving there are systems at work, neurologically, that take in a great deal of information and processes that information quickly to make quick decisions and react and respond," said Bilotti. "All our senses have to be sharp."



Dr. Edward Bilotti

drugs before driving, Bilotti said, severely inhibits the functionality of those systems in regard to our ability behind the wheel, and in more ways than one.

ALCOHOL

Alcohol, being a nervous system depressant, is going to slow reaction time and impair judgment, Bilotti said.

The use of alcohol or

Bring a healthy dose of sick-etiquette to work

hen the common cold hits, sharing is not caring BrandPoint Being considerate of others when you're sick is one of the first steps to good sick etiquette.

For example, you may think you're going to score points for showing up at work despite feeling under the weather. However, if you were to run this by an etiquette expert like Diane Gottsman, she would probably tell you the reverse is true.

"A recent survey found that half of Americans feel anxious about getting sick when others cough around them," Gottsman says. "So when you cough, your co-workers are likely going to be thinking of themselves and may not sympathize with you."

That's why Gottsman says the best thing you can do is steer clear of the office. If working remotely isn't an option, it is best to take a sick day.

"When you're sick, it's so important to take precautions to keep your germs from infecting others, which should always include staying home from work or other activities until symptoms have subsided," says Gottsman. "I understand that sometimes life seems too busy to get sick or a workplace may not offer enough paid time off. So staying home and putting work on the back burner until you're well is

not an option for everyone. Still, productivity will decline when you are sick and you may prolong your illness by overexerting yourself."

With that, Gottsman says the name of the game is keeping those germs to yourself. Don't be afraid to be demonstrative about that so you send a clear signal that you care and you don't want to infect anyone - it will put your friends and colleagues at ease. Here are Gottsman's sick etiquette tips:

Telecommute: If it is physically possible for you to complete a day's work at home, that is probably the second most ideal solution to taking a sick day. If that's not a typical arrangement at your place of employment, though, frame it as being beneficial to your boss and your fellow employees. For example: "I understand we have this important deadline coming up, which is why I would prefer not to spread this bug to others. What if I worked on the project from my home office today instead of coming in? If you sent me the call-in information, I could still join the conference call later. Of course, if you need anything at all, I'm just a phone call or email away."

Touch no one: If a friend moves in for a hug or a handshake, kindly warn them that you are recovering from a cold and would prefer to "play it safe" before extending your hand or

leaning in for a hug.

Keep a sickness arsenal: Keep your desk well stocked to help you treat your symptoms and keep common areas germ-free. For your kit, consider items like tissues, disinfecting wipes and hand sanitizer, as well as relief for sick symptoms, like pain relievers and a cough syrup.

Avoid shared surfaces: Cold viruses can survive several hours on surfaces, transferring easily to your colleagues. Germs can be hard to contain and avoid, but you can do your part by wiping down shared areas like a table or chair with a disinfecting wipe when you are finished using them.

Cover your mouth wisely: Coughs and sneezes give germs and viruses a nice little vehicle to get around and infect others nearby. When you must cough or sneeze, use a tissue or cough into your arm or elbow - never your hand, because the hands help spread the germs around. When using a tissue, promptly dispose of it and sanitize your hands.

Minimize coughing: When people hear someone cough in a crowded space, 26 percent feel annoyed, and 46 percent feel anxious about getting sick themselves, according to a recent online survey conducted by the Harris Poll. Keeping the medicine cabinet stocked with a powerful cough reliever is one effective way to suppress your cough.

It's not always possible or practical to stay home for several days when you come down with a cold, but practicing good sick etiquette can help keep viruses from spreading to those around you.

driving. Furthermore, we need to improve substance use screening and assessment education to help determine which driver impairments are associated with each substance, particu-

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considered unsafe for