

## Module 2: The Human Factors Review

### Summary of Module 2:

- Human factors involved in driving include psychological factors, fatigue, emotional distress, driving distractions and alcohol and drug use.
- Everyone needs some stress in their lives, however, it should be controlled and individuals should be aware of how they deal with stress.
- The body responds to stress with three stages: alarm, resistance and exhaustion.
- Four methods to address the onset of stress are physical activity, sharing your feeling of stress with someone, cooperation instead of confrontation and being aware of your limits.
- It is vitally important to calm yourself before driving a vehicle, this is the best deterrent of allowing stress to negatively influence driving behavior.
- Fatigue may cause a phenomenon known as “freeway or highway hypnosis” in which a driver becomes drowsy or unaware while driving.
- Driving while sleep deprived, driving alone and driving frequently are types of drivers that are at greater risk of having a motor vehicle crash.
- Truck drivers are one type of driver that are especially susceptible to fatigue-related crashes.
- To prevent fatigue from affecting your driving it is important to get a good night’s sleep, bring a passenger on trips so that he/she can share the driving responsibility, stop about every two hours and avoid alcohol and other drugs.
- Emotionally distressed drivers are at an increased risk of motor vehicle crashes because they are not concentrating on the driving task, but are concentrating on what has them upset.
- Emotionally distressed drivers may exhibit aggressive driving tendencies that may be manifested by running red lights, running stop signs, not yielding the right of way or reckless driving.
- Aggressive driving may lead to road rage, when a driver actually acts in a violent manner toward others.
- Calming techniques should be used if a driver is emotionally distressed while driving.
- Drivers use four methods to cope with emotional trauma including shock, numbing, denial; recoil and impact, attribution and resolution.



- Having a good attitude while driving, driving defensively and not letting stress or hurriedness affect your driving will help drivers to drive safely.
- Risk-taking drivers enjoy the thrill of danger, enjoy impressing passengers or other drivers, disregard personal safety, try to control situations or overestimate their ability and justify risks because they are taken in a “noble” cause.
- Good drivers generally have a good level of attention, accurate observation, coordinate vehicle speed and direction to the situation appropriately, are aware of the inherent risks of driving, have a realization that heavy traffic and the actions of others are beyond their control, have the ability to let go of perceived personal insults by the actions of other drivers and are aware that there is nothing out on the road worth dying over.
- Driving distractions may include but are not limited to using cellular telephones, shaving, applying makeup, reading books or maps, attention to non-driving task related issues outside of the vehicle.
- The use of hand-held cellular phones is prohibited in New York unless the phone is being used for calling 911, calling medical, fire or police personnel in response to an emergency, operation of an emergency vehicle in performance of official duties or is a hands-free mobile telephone, which will allow the user to communicate hands-free.
- Drivers may be fined up to \$100 and incur a traffic infraction for violating the New York Cellular Phone Law.
- Alcohol is a depressant that increases the possibility of motor vehicle crashes because it slows reflexes, reduces vision and causes people to lose self-control.
- Effects of alcohol on the central nervous system include impaired judgment; impaired muscle coordination; decreased peripheral vision, multiple vision and blurring; dizziness and night vision impairment; slowed complex reaction time and drowsiness.
- Organs of the body that alcohol affects are the brain, stomach, liver and vision.
- Prescription drugs, over-the-counter medications, depressants, stimulants, narcotics and hallucinogens are the types of drugs that affect driving.
- The synergistic effect is the event that happens when a person combines two or more drugs at the same time; each drug compounds the effect of the other, further altering the driver’s ability to safely operate a motor vehicle.
- BAC is the abbreviation for the concept of Blood Alcohol Concentration and is the measurement of the weight of alcohol in your bloodstream per unit of volume.
- A person may be charged with Driving While Ability Impaired (DWAI) if in control of a motor vehicle with a BAC of between .05 and .07.
- Alcohol is a depressant that acts as a stimulant, provoking a sensation similar to euphoria, which makes a person wrongly assess his capabilities and as a result, taking risks that he/she may not normally take.

- Legal penalties will be incurred for persons that violate the DWI, DWAI and Zero Tolerance laws in the state of New York.
- The financial consequences of driving under the influence are devastating if the costs of being charged with DWI are taken into consideration.
- DWI costs may include rehabilitation for the injured, higher insurance and healthcare costs, criminal charges for the person found guilty of DWI and the loss of family members and loved ones.
- Monetary costs of DWI include medical costs, work loss (lost productivity), public service costs, property damage and quality of life costs.
- Impaired drivers may be in areas where bars and nightclubs are located.
- Impaired drivers may or may not be easy to identify, because some of the behaviors that they exhibit may also be exhibited by drowsy or fatigued drivers.
- Midnight to 3 a.m. on Saturdays and Sundays was the deadliest 3-hour period in 2006 for impaired drivers.
- Impaired drivers may be found on roadways frequently during evening hours, holidays and on paydays.
- Alternatives to driving impaired include choosing a designated driver, spend the night where you drink (at a friend's house for example), take a taxi or do not drink alcohol at all.