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Clifton Park, NY
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Mineola, NY
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Columbus, OH
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Cranberry Twp., PA
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Lancaster, PA
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354 North Prince Street
Lancaster, PA 17603

ROBSON FORENSIC PRESENTS

Alcohol Impairment

When alcohol is identified as a factor in an injury incident, it is often assumed to be the only cause. Our experts determine if alcohol played a causative or contributing role.

Our human factors and biomechanical experts can evaluate the effects of alcohol on the performance and perception of individuals. Our dram shop experts can evaluate the actions of establishments serving alcohol and address standards of care in issues of underage drinking. In vehicle crashes, our motor vehicle experts investigate whether or not roadway or vehicle defects created unreasonably dangerous conditions. Other experts can address standards of care in the safety and security of premises and workplace.

Inside you'll find highlights of investigations where **the effects of alcohol were involved** as well as information on some of our experts in alcohol-related incidents.

Contact us at one of our offices listed on the reverse of this piece, or visit www.robsonforensic.com.

Robson Forensic
Engineers, Architects, Scientists & Fire Investigators

Alcohol Impairment

Our Expertise in Cases Involving Alcohol:

- ◆ Dram Shop / Liquor Liability
- ◆ Motor Vehicles / Crash Reconstruction
- ◆ Biomechanics / Injury Causation
- ◆ Human Factors / Risk Perception
- ◆ Questions of Supervision
- ◆ Premises Liability / Security
- ◆ Training & House Policies
- ◆ Host / Parent / School Liability

Other Expert Areas:

- ◆ Fire / Explosions
- ◆ Construction
- ◆ Professional Liability
- ◆ Product Liability
- ◆ Marine
- ◆ Sports and Recreation
- ◆ Environmental Health and Safety
- ◆ Agricultural / Food Safety
- ◆ e-Discovery
- ◆ Meteorology
- ◆ Industrial Safety
- ◆ Workplace Safety
- ◆ Transportation

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Recent Case Highlights

Club serves intoxicated driver who then causes fatal crash.

A woman was killed and her husband severely injured when their car was struck by a drunk driver. Shortly before the crash, the driver spent the day drinking at his golf club. Robson Forensic was retained to determine if the club's actions were improper in a manner that resulted in the crash.

The club had been having a party that included self-serve draft beer and drinks for purchase. Over the course of about 10 hours, the driver had been permitted to serve himself and also purchase additional alcohol at a snack bar. After the event ended, the driver moved to the club's bar, where bartenders continued to serve him even after he became loud and boisterous. The driver was then permitted to leave the club and drive himself home. On the way, he struck the victims' car, killing the wife and severely injuring her husband. The driver was found to be visibly intoxicated at the scene with a blood alcohol content (BAC) of 0.20%.

Our expert showed that given the driver's condition at the scene, he would have been visibly intoxicated while still at the club. We showed that any reasonably acting bartender would have identified that the driver had consumed an unsafe amount of alcohol while still at the bar, would have stopped serving him and would also have prevented him from driving away. We found that the club's bartenders lacked proper training and certification to serve alcohol safely. The club also failed to put in place "house policies" requiring servers to monitor patrons' consumption and prevent intoxication.

We showed how the club's actions violated accepted standards of care for furnishing alcohol at a licensed establishment, and also violated specific requirements of the State Liquor Control Board in serving a visibly intoxicated person.

We showed that these failures of the club and its staff were a direct and proximate cause of the car crash.

This case settled prior to trial.

Intoxicated man dies in fall.

An intoxicated unconscious man was discovered on a cement floor below a loft where it was claimed he had been sleeping. After nine months in a coma, he died without regaining consciousness. His estate claimed he fell from the edge of the loft and blamed his fall on defects in the railing at the loft edge. Robson Forensic was retained to reconstruct the event by evaluating his injuries and to determine if the railing was defective and if his intoxication was a cause of the incident.

Our biomechanics expert evaluated his internal and external injuries, including bleeding from the ear, rib fracture, a linear skull fracture, massive brain swelling and Traumatic Brain Injury (TBI). She calculated the fall distance, speeds, and forces and factored in the effects of intoxication on his fall.

Toxicology analysis revealed a blood alcohol content (BAC) of about 0.20% when he went to bed, roughly an hour and a half before his fall and roughly 30 minutes after his BAC would have peaked. At this level of intoxication, he would have had sensory motor impairment, loss of coordination, impairment of gait and balance, and decreased sensory response.

Someone experiencing these effects would be less capable of recovering from a fall or loss of balance. Review of his injuries confirmed that he made no attempt to break his fall.

We showed that his injuries were consistent with a low-speed blunt trauma to the rear of the head in a fall from standing height on the same level. Had he fallen from the loft rather than a standing position, his injuries would have been more severe since the fall velocities were higher and the energy at ground contact would have been nearly three times that from the standing position.

Our analysis showed that it was impossible for the man to have fallen from the loft area, so claims of a defective railing were irrelevant. Our expert showed that the man fell from a standing position. Since he was intoxicated, he was unable to respond quickly enough to protect his head or back during the fall. This impaired reaction caused his death.

This case settled favorably for the defendant prior to trial.

Intoxicated patron falls in bar.

A patron was rendered a paraplegic in a fall from a stair in a bar. Robson Forensic was retained to determine whether or not the bar conditions and operations were dangerous and caused the injury.

The patron arrived at the bar intoxicated and the bartender continued to serve him for more than two hours before refusing service and charging him for a room in the upstairs hotel. The patron left the bar unescorted on his way to the rental room. Witnesses heard a loud sound, went to investigate, and found the patron on the lobby floor next to the stair leading up to the rental room. The bar owner had claimed that his injuries were not related to the stair conditions, and that the patron had failed to take reasonable care.

There were no dislodged items in the area, and we showed that the single loud impact noise could only have been caused by his body striking the floor after a fall from height. The stair was the only location from which he could have fallen, and based on the location of his body, our expert determined where he had been on the stair before he fell. From that location, the fall must have been over the handrail as a result of a loss of balance while on the stair.

Our expert showed that the staircase was deteriorated and treads were worn and missing nosing in the area of the fall. This made the stair dangerous and slippery. Further, the handrail along the exposed stair edge was dangerously low, such that any loss of balance was likely to produce a fall over the poorly protected side. We showed that owner's maintenance of the stair and railing violated accepted codes and standards and that the stair would have been dangerous even for a sober person.

We explained how these hazards were significantly more dangerous for persons whose balance, perception, and ability to react had been impaired. We explained how serving an already intoxicated patron before sending him up this stair had placed him at greatly increased risk. We also explained that sending him up the stair without a sober person to make sure he arrived safely was unreasonable given his impairment and the conditions of the stair.

The case settled before trial.

Featured Experts

Elizabeth A. Trendowski

Dram Shop and Liquor Liability

Liz has been working in the liquor and hospitality industry for over twenty years. She has been a restaurant manager; CEO of a wine and spirits wholesale operation; a liquor permittee (holder) of multiple liquor licenses; and has been a leader in her field.

She was the Founder and President of SMART, a national certification program for the responsible service of alcohol, and one of only three Independent TIPS Master Trainers in the U.S. She was the Executive Director of the Connecticut Licensed Beverage Association and served on the Board of Directors of the Connecticut Restaurant Association. She was the President of the Connecticut Hospitality Educational Foundation. She also founded SMART Bartending Program, a certification program teaching professional mixology.

Liz has special expertise in standards of care regarding underage drinking.

Currently, she is an Adjunct Professor at the University of New Haven's School of Hospitality teaching bar and beverage management. She has taught in private, academic, and military settings and has spoken at regional and national conventions on issues of Dram Shop and Liquor Liability. She has her private pilot's license, and insurance and securities licenses.

William J. Vigilante Jr, PhD

Human Factors and Ergonomics

Dr. Vigilante combines over fifteen years of research in higher education and industry with five years in corporate America at IBM as a human factors engineer. His research into decision making and perception and how they relate to risk taking, driver performance, safety, and hazard analyses is a unique skill set. He has investigated over 50 vehicle collisions.

Dr. Vigilante's education and experience allows him to quantitatively determine when a driver should have been able to see a roadway hazard and if there was enough time and distance to respond and safely avoid a collision. Dr. Vigilante's analysis often includes an evaluation of the sight distance, scene lighting, vehicle head lighting, roadway contrast, and driver's perception-reaction time. He has also analyzed the effects of expectations and positive guidance on driver performance and whether alcohol played a part in the driver's ability to respond.

Dr. Vigilante is a member of the Human Factors and Ergonomics Society, the American Society of Safety Engineers, and the Transportation Research Board. His numerous scientific publications and presentations are national in scope. He is regularly asked to review research publications and studies to determine their merit for inclusion in scientific journals and professional meetings.

Eric E. Stambaugh

Vehicle Expert & Crash Reconstructionist

Eric is a mechanical engineer who is trained and experienced in the reconstruction of crashes involving automobiles, motorcycles and commercial vehicles. Eric determines the cause of a crash and can document the crash site using Total Station mapping: accurate electronic measurement with elevation readings.

Eric has been building and racing both sprint cars and motorcycles for more than 22 years. He can disassemble, rebuild, tune and maintain every aspect of a car or motorcycle from the chassis to the engine, carburetor and suspension. He has been a professional sprint car driver, crew chief and mechanic, and he has won multiple races and series championships. Eric has also been a manufacturing engineer for Tyco electronics and a mechanical engineer for Texaco Research and Development in the area of automotive fuel and lubricant testing.

Eric is a member of the Society of Automotive Engineers, the American Motorcyclist Association and the American Society of Mechanical Engineers.