

Forensic Pathology Contributions to Accident Investigation and Product Liability

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According to the Centers for Disease Control and Prevention (CDC), nearly 170,000 unintentional injury deaths occur each year in the United States.¹ Unintentional injury is the third leading cause of death in this country and is often a very important consideration in civil and criminal matters. Forensic pathology, the science devoted to understanding causes and manners of death, can help accident investigators answer key questions related to insurance claims and product liability, and its conclusions can have profound impact on all parties involved.

The circumstances surrounding accidental death are not always simple. At times, forensic examination confirms the cause and manner of death originally hypothesized by investigators. Other times, it provides insights that call into question the relative health of an individual or the circumstances of the injury occurrence. In other words, the cause of death as stated may not always be what actually led to an individual's demise.

Forensic pathology investigations can include incidents involving vehicular trauma, falls from height, occupational hazards, gunshot wounds, toxicology, burns, drowning, asphyxiation, electrocution, suicide-related events, blunt force trauma, sharp force injuries, abuse cases, and in-custody incidents. These investigations attempt to evaluate how injuries took place; whether the trauma or injuries sustained are consistent with the stated circumstances surrounding the occurrence; how past and recent medical history relate to the demise of the individual; and how best to interpret available toxicology relevant to the subject incident.

This process can also be applied to wrongful death cases and product liability cases. In wrongful death cases, clients want to ensure that the reason an individual passed away is forensically compatible with what is being reported. Thorough forensic evaluation in wrongful

death and negligence investigations can call the source of an injury into question or reveal patterns suggesting that statements about actions or circumstances may not align with what actually occurred. In such cases, it is important to be able to partner with skilled experts in biomechanics and other specialties to perform complete site, machinery, and vehicle inspections to understand the true nature of the incident.

Our team at Exponent recently provided expert testimony for a case in which an individual's vehicle had been rear-ended. Opposing experts indicated that the individual was conscious and living for three to five minutes after he experienced blunt force trauma. Upon cross-examination, the local medical examiner dramatically reduced this timeframe of possible awareness. Our team's analysis confirmed that the blunt force trauma occurred both frontally and from behind. Our analysis of the toxicology reports also indicated that the individual had very limited inhalation in a post-crash vehicular smoky environment and was unconscious from the blunt trauma. The constellation of forensic information supported that blunt force trauma was the true cause of the individual's death and allowed the jury a clear understanding of the circumstances that led to the individual's demise.

¹ <https://www.cdc.gov/nchs/fastats/accidental-injury.htm>

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Exponent's Expertise

Exponent's multi-disciplinary team of medical and engineering experts has performed thousands of accident investigations and can offer conclusive insights into insurance claims, product liability concerns, and civil and criminal cases.



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