



G130 Drag Racing of Snowmobiles on Asphalt: A Novel Cause for Sudden Violent Death

Abraham T. Philip, MD, Brian P. Ehret, and Robert Stoppacher, MD, Onondaga County Medical Examiner's Office, 100 Elizabeth Blackwell Street, Syracuse, NY 13210*

After attending this presentation, attendees will learn about a summer activity, a variation on what was previously known to be done exclusively during winter, and about the fatal consequences that it led to.

This presentation will impact the forensic science community by providing insights on a topic about which there is almost no information in the forensic literature, as this case report details the sudden violent death of a participant in timed trials of a snowmobile which was used to race on asphalt.

Snowmobiles were initially developed to move people and supplies in regions where heavy snow prohibited the use of more conventional vehicles. Today snowmobiling is a popular wintertime recreational lifestyle activity in several parts of the world. There are millions of registered snowmobile users and the recreation/manufacturing complex generates billions of winter tourism dollars for the snow belt areas of North America.¹ More than 50% of snowmobile owners surveyed consider use of the vehicle as a family sport.¹ With the increasing popularity of this recreational activity, there has been an increasing incidence of injuries and deaths, the inevitable consequence of human interaction with high performance vehicles. Until the tail end of the last millennium, the snowmobile remained a stationary fixture in one's garage or side of the lawn during the months of May to November. A fact that unfortunately changed in the early 1990's with the introduction of asphalt drag strip racing for snowmobiles.

Drag racing traditionally has been an acceleration contest between two car drivers, to determine which vehicle has the better speed related performance. The vehicles start from a stationary position and takeoff usually after a signal from a set of "christmas tree lights," and race on a track 1/8 or a 1/4 mile long. Drag racing started in the 1930s, when competitors raced along deserted stretches of roads to see who's vehicle was faster. The National Straightline Snowmobiling Racing (NSSR) is an organization started in 1986, to verify and certify results of dragstrip snowmobile races. In 1993, it included asphalt drag racing as one of the competitive classes that it arbitrated on.

The Empire State Timing Association has operated a Safety Park Dragstrip in the Central New York since the 1960s. It is a 1/4 mile racing strip, with a long stretch of road to allow cars to slow down. The time-slip booth provides the participants data about how long it took to get to various points down the track as well show data on how fast the vehicle was traveling at the half way point (1/8 mile) and at the finish line (1/4 mile) as well as who won the race, if it was a competition.

This case report is about a 24-year-old man who was operating a custom made asphalt snowmobile on a timed trial on the race track. He reportedly had been asphalt racing for the last four years. It was his first day of using his new sled, and he started his third trial run down the track. He was clocked at 161 mph at the 1/4th mile point. He unfortunately lost control of the vehicle, which struck a guardrail. He was ejected off the sled and his body came to rest in a wooded area approximately 300 feet from the initial collision point. The sled, after multiple ongoing collisions with the guardrails on either side, finally came to rest approximately 500 feet from where the body rested. The external examination, with full body x-rays, revealed devastating head injuries, despite the use of a helmet, traumatic avulsion of left forearm, open fractures of left proximal humerus, open fracture dislocation of the right ankle and closed dislocation of the left knee.

A search of the literature revealed no published information on this type of a sudden violent death.

References:

1. Pierz JL: Snowmobile injuries in North America; *Clinical Orthopedics and Related Research*; 2003; 409; p29 – 36.

Snowmobile Accidents, Drag Racing on Asphalt, Sudden Death