



Pathology/Biology Section - 2016

H108 Deaths Associated With a November 2014 Snowstorm (“Winter Storm Knife”) in Erie County, New York

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After attending this presentation, attendees will better understand the causes of death during a recent snowstorm in Erie County, NY.

This presentation will impact the forensic science community by providing information concerning what types of death are to be expected when there is a large snowfall and how to prepare for such an occurrence. This information could be used to guide preventive measures in order to potentially save lives.

In November of 2014 over the course of three days, up to seven feet of snow fell across southern Erie County, NY, in a lake effect snowstorm named “Winter Storm Knife” by local officials. This was one of the largest snowstorms in the region in terms of not only the amount of snow but how fast it fell. There were travel bans throughout the region, and many people were trapped in their cars on roadways and could not be reached even by emergency personnel for hours if not days. Even after the snow stopped, it took several days to clear enough snow to reopen many of the roads, and there were millions of dollars of damage to local homes and buildings due to roof collapses. This storm was also one of the deadliest in the region in recent memory.

There were 12 deaths thought to be attributed to the storm that were reported to the Erie County Medical Examiner’s Office. Five of these deaths were certified as accidental in nature, and the remaining seven were due to natural causes but associated with the snowstorm. These included four people who died of cardiac events while trying to clear snow from their homes or businesses, two people who needed routine urgent medical care but were unable to be reached by emergency medical services, two people who died of carbon monoxide poisoning while waiting in their cars for assistance, two people who died of exposure (one outside and one in an abandoned house), one person who was struck by a vehicle clearing snow, and one elderly person who died shortly after being emergently transported from one nursing home to another when the roof was deemed unstable.

As with most large snowfalls, cardiac death associated with shoveling was the most common cause of death; however, an unexpected cause of death in this particular storm was people who died in their cars from carbon monoxide poisoning. In both cases, unbeknown to the drivers, the tailpipes of the cars became occluded by snow while the cars were running, causing the passenger compartments to fill with the deadly gas. While there is general awareness in the region that exhaust pipes on houses need to be examined during large snowfalls to make sure they are clear, it is not common for snow to accumulate so rapidly that people would be trapped in their vehicles with enough snow on the ground to occlude the tailpipe. Increased awareness of this hazard during a large snowfall could save lives.

Snowstorm, Death, Autopsy