G88 Evaluation of Less-Lethal Impact Munitions

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After attending this presentation, attendees will learn about the types of less-lethal munition systems available, their relative safety, and forensic considerations.

This presentation will impact the forensic community and/or humanity by providing a further understanding of the relative safety of lesslethal impact munitions that will assist forensics examiners in the study, analysis, and reconstruction of events associated with serious injury or death.

Law Enforcement is embracing the concept of less-lethal weaponry. Less lethal options are demonstrating their worth in reducing injury to officers, and often suspects while providing alternatives to higher force options. The function of these less lethal devices is often misunderstood. When a negative outcome or even death results from the use of a less lethal option, the forensic examiner is often called upon to analyze and reconstruct the incident.

There is currently a lack of independent data useful for the comparison of the various products available on the market. Police agencies and trainers often have to rely on manufacturer and marketing data to select munitions and tools for their agencies.

A study was devised in an attempt to develop a more objective standard.

Six basic types of specialty impact munitions were examined for this initial study; 12 Gauge bean bags, 40mm bean bags, 40mm sponge type rounds, 37mm ARWEN/Sage variants, FN303, and Pepperball products. The ordinance was fired at 10 feet and 35 feet into bare and covered ballistic gelatin. The ballistic gelatin was used to observe energy distribution and relative injury potential across the spectrum of munitions tested.

Less-Lethal, Impact, Bean Bag

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