



H190 It's Not Just Assault Rifles: A Case Study of a Mass Shooting Involving a Shotgun

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Learning Overview: After attending this presentation, attendees will better understand the most common shotgun and its prior use in mass shootings.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by highlighting the less common use of shotguns in mass shootings and providing a review of shotgun ballistics for forensic pathologists. While shotgun injuries are common, death tolls from single events do not generally reach the double digits.

There is no consensus definition of mass shooting; however, the Congressional Research Service defined it as “incidents occurring in relatively public places, involving four or more deaths—not including the shooter(s)—and gunmen who select victims somewhat indiscriminately.”¹

Since its introduction in 1951, the Remington® Model 870 has become the best-selling shotgun of all time—more than 12 million have been made, and it is used in several different countries by law enforcement, the military, and civilians.² With multiple different variants and modifications and cheaper cost, the Model 870 is used in a myriad of different situations: self-defense, clay and field shooting, hunting (deer and fowl), and tactical. These guns normally hold five or seven shells that are easily fed into a bottom-loading chamber to allow for reloading without pausing.

Ten people were killed and 13 injured in a mass shooting incident at a large local high school. The victims were confined to one room and two small closets. The suspect was arrested approximately 29 minutes after the first shot was fired. Police discovered a .38 caliber Rossi® revolver on scene and a Remington® 870 12-gauge short-barreled shotgun that the suspect relinquished on scene. Both were legally owned by a relative. The suspect discarded the Rossi® revolver early in the attack after emptying the chamber and fired all remaining shots from the Remington® 870. The barrel had been sawed off even with the magazine tube, and double aught buckshot (each pellet is a .30 caliber size) was recovered at the scene. The shooter wore a bandolier with the ammunition and reloaded by hand. Police first engaged the suspect within four minutes of the first shot; however, he was able to hold off police with the shotgun only and continue his spree until surrendering to the police without sustaining injury.

At autopsy, shotgun pellets were recovered from each decedent, each within the double aught buckshot caliber. The ammunition used had approximately eight pellets per shot; multiple decedents had more than eight, indicating they had been hit by multiple shots and often in fairly tight configurations.

Out of 143 weapons used in mass shootings (lone shooter in a public place with 3+ deceased) in America from 1982–2012, one public database notes that 71 were semiautomatic handguns (50%), while 21 shotguns were used (15%).³ This case shows that while semiautomatics are the most commonly used, shotguns can be just as deadly and may be more readily accessible.

Reference(s):

1. Bjelopera, Jerome P., Bagalman, Erin, Caldwell, Sarah W., Finklea, Kristin M., and McCallion, Gail. 2013. *Public Mass Shootings in the United States: Selected Implications for Federal Public Health and Safety Policy*. Report for Congress, Washington D.C.: Congressional Research Service.
2. Remington Arms Company, LLC. 2018. “Model 870” *Remington: A New Era of Precision*. Remington Arms.
3. Follman, Mark et al. 2018. *A Guide to Mass Shootings in America*. June 28. Accessed July 30, 2018. <https://www.motherjones.com/politics/2012/07/mass-shootings-map/>.

Shotgun, Mass Shooting, Ballistics