

## TECHNICAL NOTE

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# Modified Shotguns in Turkey from 2006 to 2008

**ABSTRACT:** This study investigates the legal status of modified shotguns in Turkey by examining the cases submitted to the Aydın Regional Criminal Laboratory between January 2006 and August 2008. A total of 351 shotguns used in crimes were examined. These guns were evaluated in respect of their type, size, caliber, fitness for use, and legal classification. Eleven percent of these shotguns had been modified and it was found that 55% of the modified shotguns were classified according to law 6136 and qualified as a pistol and 45% were classified according to law 2521 and qualified as nonstandard shotguns. Within the Turkish criminal justice system, a nonstandard shotgun attracts a less stringent sentence than a pistol. It would therefore appear that this sentencing structure is considered when modifying shotguns in Turkey. This is clearly a loop-hole in the legislation that could perhaps be investigated and closed.

**KEYWORDS:** forensic science, ballistics, shotgun, modified, sawn off, barrel

Shotguns can differ from rifles and handguns in their construction, mode of operation, ballistic capabilities, and in the cartridges they are designed to fire. Rifles and handguns are generally used to fire a single projectile down a rifled barrel. Although they can fire a single projectile, or “slug,” shotguns are usually employed to fire multiple projectiles, or pellets, down a smooth-bored barrel (1). Like a rifle, the shotgun is usually held to the shoulder. However its barrel wall is generally thinner than that of a rifle barrel and its projectiles are generally fired at lower velocities (2). Shotguns are governed by law 2521 in Turkey.

Different types of shotgun are used in crime in Turkey (3). Some of these are in their original “full length” state, whereas others have been modified by shortening and are often referred to as “sawn off” shotguns. Along with pistols, shotguns are one of the most commonly used guns in Turkey and it therefore follows that these guns are also frequently used in crime. One of the main reasons for this is that shotguns can be purchased relatively easily compared with other firearms. People who are older than 18, do not have a criminal record, and who can provide a health report can apply to the authorities for possession of a shotgun. In addition, shotguns are cheaper in Turkey than other types of firearm.

The 12 and 16 bore are the most preferred calibers of shotgun in Turkey. By way of comparison, in New Zealand approximately half of all forensic firearm casework submissions involved 12-bore shotguns (4). In addition, the National Firearms Forensic Intelligence Database (NFFID) of the Forensic Science Service (FSS), U.K. shows that in England and Wales *c.* 70% of shotgun submissions to the FSS between January 2006 and August 2008 were 12 bore. In Turkey, a standard full-length shotgun will usually have a smooth-bore barrel and, provided that its barrel is of the correct length, it will fall under law 2521. Within this section of the law, the specifications

of shotguns are outlined and must be followed by manufacturers. These so-called TSE/870 standards are shown in Table 1 (5).

When a full-length shotgun is modified and shortened, its legal status also changes. In Turkey, law 6136 deals with the classification of firearms, including pistols. If a firearm has a barrel length of <30 cm, and an overall length of <50 cm, it is classified as a pistol. Therefore, provided it has a barrel length of <30 cm and an overall length of <50 cm, a modified shotgun would be considered to be a pistol for the purposes of the firearms legislation. Law 6136 is associated with much heavier sentences than law 2521. In addition, the criminal fraternities are aware of these different sections of the law and therefore perhaps consider this when modifying their shotguns. In this technical report, we briefly summarize the findings of modified shotgun submissions to the Aydın Regional Criminal Laboratory between January 2006 and August 2008.

## Materials and Methods

The material for this report consists of the cases submitted to the Aydın Regional Criminal Laboratory in Turkey between January 2006 and August 2008. These guns were evaluated in respect of the type of the guns, barrel(s) length, overall length, caliber, design, fitness for use, and legal classification.

## Results

Three hundred fifty-one shotguns were examined during January 2006–August 2008. Of these, 233 were semi-automatic, eight were break-action double barreled, 104 were break-action single barreled, and six were flint-lock shotguns (Fig. 1). When caliber was considered, 274 of them were 12 bore, 62 were 16 bore, two were 24 bore, four were 28 bore, and three were 36 bore.

Thirty-eight (11%) of the 351 shotguns submitted had been modified. The majority of these modified shotguns were single barreled. Thirty-five of the 38 modified shotguns were single barreled and three were double barreled. None were semi-automatic or flint-lock shotguns. Within the modified single-barreled shotguns, 10 were 12 bore, 21 were 16 bore, one was 24 bore, two were 28 bore, and

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TABLE 1—The barrel length according to the caliber as specified by the Turkish Standards Institutions (TSE).

Caliber of shotgun	Barrel length (cm)
10 bore	61–76
12 bore Trap	70–86
12 bore Skeet	64–68
12 bore	55–76
14 bore	55–76
16 bore	55–76
20 bore	55–76
24 bore	55–70
28 bore	55–70
32 bore	55–70
41 bore	55–70
9 mm	55–70



FIG. 3—Modified shotgun classified as a nonstandard shotgun.

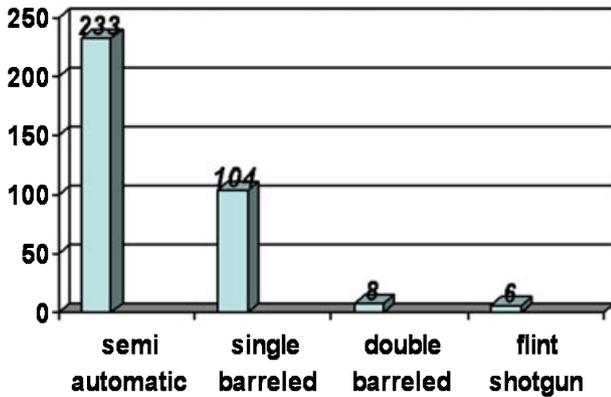


FIG. 1—The types of shotgun submitted between January 2006 and August 2008.

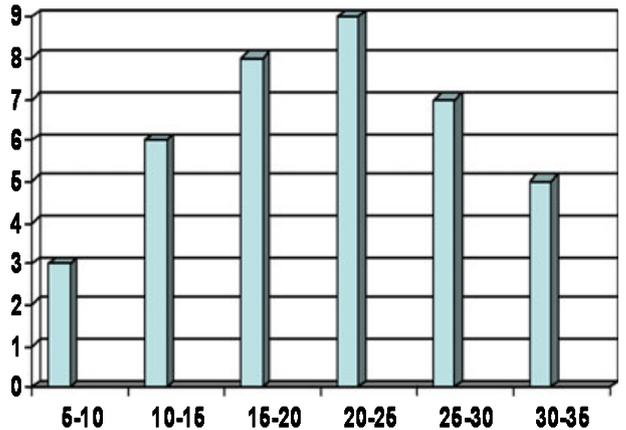


FIG. 4—The barrel length of modified shotguns submitted between 2006 and 2008.



FIG. 2—Modified shotgun classified as a pistol.

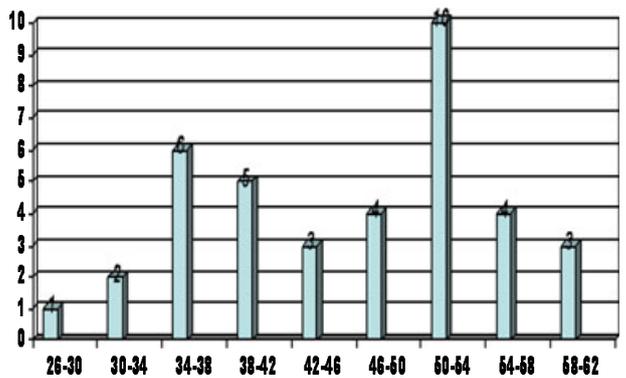


FIG. 5—The overall length of modified shotguns submitted between 2006 and 2008.

one was 36 bore. All three of the modified double-barreled shotguns were 12 bore.

After measuring the dimensions of the 38 modified shotguns, 21 of them (55%) were classified according to law 6136 and qualified as a pistol (Fig. 2). Seventeen of them (45%) were classified according to law 2521 and qualified as nonstandard shotguns (Fig. 3). The measurements of their barrel and overall length are shown in Figs. 4 and 5.

**Discussion**

The most preferred calibers of shotgun in Turkey appear to be 12 and 16 bore. In addition, 12- and 16-bore cartridges are the

most easily purchased in Turkey. It is therefore unsurprising that the most common calibers of modified shotgun submitted to the laboratory are also 12 and 16 bore. This is partially mirrored in England and Wales where the NFFID shows that 78% of modified shotguns submitted to the FSS during the same time period as this study were 12 bore. As 17 of the 38 modified shotguns examined were classified under law 2521 the sentences were less severe than for the remaining 21 modified shotguns that were classified under law 6136. It is also important to note that several of the modified shotguns had been shortened to a barrel and overall length that were just longer than the lengths outlined in law 6136. It would therefore appear that these measurements had been considered when modifying the guns, ensuring that the less stringent sentence

for a nonstandard shotgun, rather than a pistol, would be applied. This is clearly a loop-hole in the legislation that could perhaps be investigated and closed.

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