

In the real world the flight of a bullet will vary for a variety of reasons. Altitude, temperature, wind speed, relative humidity, and barometric pressure will all tend to have some effect on the flight of the bullet.

We will not attempt to review the impact of each of these variables on bullet flight in this course, but instead show a shooter how they can use a ballistics chart to understand key components of ammunition Ballistics, including bullet weight, muzzle velocity, energy and trajectory.

For purposes of this example, we will chose two bullets, 45-70 Government, a heavy slower bullet, and a Remington 7mm-08, a smaller but faster bullet.

Dependable, uniform expansion or "mushrooming" that maintains a high percentage of the bullet's weight is desired for maximum power and less meat damage. Shorter, round-nose or flat-nose bullets typically deliver greater knockdown power, but only at short- to medium-range— due to the fact that their blunter contour causes them to lose velocity down range. Sleek aerodynamic bullets, on the other hand, hold their energy at longer ranges to produce excellent penetration and knockdown power at some very surprising distances.

The key to all this, of course, is selecting a load with a superior balance of accuracy and on-game performance for your hunting situation. You'll want a load that delivers excellent levels of both within your typical shooting ranges.



Bullets begin to fall as soon as they leave the muzzle, so typically sights are set to make the line of sight appear as though the bullet is traveling on a direct line to the target. If the gun is sighted to hit the target at 100 yards, the Ballistics of the two sample bullets would be as follows:

Velocity (ft/sec.)					
Cartridge	Bullet Wt.	Muzzle	100 yds.	200 yds.	300 yds.
45-70 Govt.	300	1810	1497	1244	1073
7mm-08 Rem.	140	2860	2625	2402	2189

Energy (ft-lbs)					
Cartridge	Bullet Wt.	Muzzle	100 yds.	200 yds.	300 yds.
45-70 Govt.	300	2182	1492	1031	767
7mm-08 Rem.	140	2542	2142	1793	1490

Trajectory				
Cartridge	Bullet Wt.	100 yards	200 yds.	300 yds.
45-70 Govt.	300	zero	-13.8"	-50.1"

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