

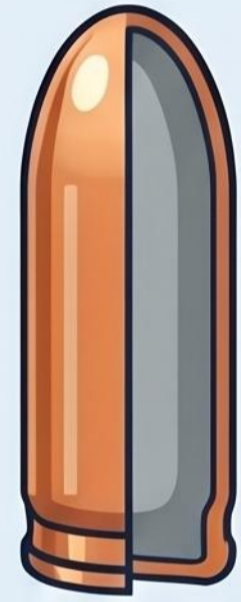
Ballistic Basics: A Guide to Bullet Types and Use Cases

TRAINING AND HIGH-VOLUME SHOOTING



FULL METAL JACKET (FMJ)

A soft lead core encased in a harder metal "jacket" (usually copper) that covers the nose and sides but often leaves the base exposed.



TOTAL METAL JACKET (TMJ)

A variation of the FMJ where the copper jacket fully encapsulates the entire lead core, including the base.

Primary Use: Practice and Competition

- FMJ and TMJ are the most cost-effective options for developing marksmanship skills, military/law enforcement qualification, and high-volume recreational shooting. Because they are simpler to manufacture, they allow shooters to maximize practice time while managing expenses.

- TMJs are ideal for indoor ranges because they prevent lead from vaporizing upon ignition, reducing the shooter's exposure to airborne lead.

SELF-DEFENSE AND PERSONAL PROTECTION



HOLLOW POINT (HP) & JACKETED HOLLOW POINT (JHP)

Projectiles featuring a hollowed-out center tip designed to expand ("mushroom") immediately upon striking soft tissue. The "Jacketed" version uses a copper sleeve to maintain the bullet's integrity during flight and ensure reliable feeding in semi-automatic pistols.



THE "MUSHROOM" EFFECT

When a JHP impacts a target, fluid pressure forces the lead and jacket outward, increasing the bullet's diameter by approximately 1.5 times. This expansion dumps maximum kinetic energy into the target for stopping power and slows the bullet down to prevent dangerous over-penetration.

Defensive Standards

- High-quality defensive JHP rounds are engineered to achieve 12 to 18 inches of penetration in standardized ballistic gelatin.
- For very low-powered "pocket pistols" (.22 LR, .25 ACP, 32 ACP), some experts prefer FMJs because these small rounds may lack the velocity to expand a JHP effectively.

HUNTING AND TACTICAL VERSATILITY



SOFT POINT (SP)

A bullet with a lead core wrapped in a copper jacket, but with the lead tip left exposed at the nose. SP bullets are designed to expand more slowly than hollow points, allowing for deeper penetration before the bullet begins to mushroom.



THE "HAPPY MEDIUM"

SP bullets offer more expansion than FMJs but greater penetration than JHPs, making them the standard for medium-to-large game.

- Hunters favor SPs for animals like deer, hogs, or bear, as the bullet can punch through thick hide and bone to reach vital organs while still expanding for a humane kill.

Feeding Reliability

- SP bullets have a smoother, more rounded profile than JHPs, which can resolve jamming issues in certain firearms like lever-action rifles with tube magazines.
- While many states require expanding ammo (SP or JHP) for hunting to ensure ethical harvests, FMJs are often unlawful for hunting due to the risk of wounding animals.

USE CASE MATRIX

Purpose: A quick-reference comparison of bullet characteristics and their ideal environments.

Bullet Type	Primary Use Case	Expansion	Penetration	Cost
FMJ	Range / Training	None	High	Low \$
TMJ	Indoor Range	Maximum ↑	Controlled	Moderate \$\$
JHP / HP	Self-Defense	Maximum ↑	→ → →	High \$\$\$
SP	Hunting	Moderate ↑	→ → →	Moderate \$\$