FIREARM FUNDAMENTALS

How to be a *Safe* and Confident Shooter

A *MUST READ* for *Every* New Shooter!

Gary L. Behr, CPC

www.FirearmFundamentals.net

Did You Know?

- What gauge is a .410 shotgun?
- How fast, in RPMs, can a bullet spin?
- What is the oldest self-contained cartridge?
- When sighting in a rifle, there are two zeros?
- What are the four variables to a bullet wound?
- There are viable alternatives to “Concealed Carry”?
- What military rifle was derisively referred to as a “Matty Mattel”?
- What is the longest sniper shot?
- How far does a sniper bullet drop at 1½ miles?
- The intent of the military “Battlesight Zero” is not to necessarily hit dead center on the target?
- Pepper spray was proven effective repelling Zimbabwe free ranging elephants?
- How many bullets were kept in the old cowboy’s six shooter?
- The current U.S./NATO 9mm pistol round, lost to the .45 ACP, in the U.S. Government’s 1906 pistol testing?
- How many rounds does it currently take, to neutralize one enemy combatant?
- What are some of the absurd Media Misnomers about firearms?

These and hundreds more fascinating facts can be found within these pages!

Nearly 400 pages filled with more than 200 illustrations
over 600 terms and relevant descriptions
and nearly 200 selected web sites

Early Reviews

"Few resources have the courage to go into the depth of information to fully explain equipment, training, rules and a plethora of other topics.

Fewer resources yet have the ability to do so in a manner which where the information is digestible, accessible and engaging to read.

Gary's book cracks the code on a tremendous resource that has a massive amount of information on par to a shooting encyclopedia but yet gripping to read like a novel you can't put down in the wee hours of the evening."

Mike Hughes, CEO-Founder
NextLevel Training LLC
History Channel's "Top Shot" Competitor, Season 3
www.NextLevelTraining.com

"... (other respected instructors) already looked (your book) over and were as impressed as I, at the massive undertaking — you have presented a vast amount of information in your book.

...These (reviewers) are top line instructors that were impressed with your work ... you'll have one of the better publications in the country for those that are both beginners, and those that want to expand their knowledge."

Alecs Dean, President
International Firearm Safety, Inc., Fort Myers, FL
www.InternationalFirearmSafety.com

Gary has put together a great book that covers all the basics for the beginner shooter. Very informational and a great read.

Scott Whiting
Police Officer / owner: Deerfield Pistol and Archery Range
www.deerfieldpistol.com and
www.professionalequipmentandsupply.com

"As a military veteran and retired law enforcement officer, I found Firearm Fundamentals to be a valuable reference book. Over the years I have taken numerous classes in firearm safety and qualifications, and the information in this book, reinforces all of the training I have had.

I especially liked that Behr covered the topics of concealed carry training, gun laws in Wisconsin, awareness of your surroundings, tips on trigger squeeze and bullet placement."

Chuck Peterson
www.ConcealedCarryPro.com & http://handgunconcealment.org

"Great book! — I read (your book) ... to brush up!
Your book makes things clear for beginners! ... Great work!"

Former Wisconsin Senator, Dr. Pam Galloway

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A *MUST READ* for *Every* New Shooter!

By

Gary L. Behr, CPC

Edited by: Linda S. Behr

The easy-to-read, annotated book introducing a new or non-shooter to the diverse fields of firearms

Edited by: Linda S. Behr

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Preface

This book is broken down into four parts and need not be read in sequence. The Table of Contents, Glossary and Index are all designed to take you right to your topic of interest. In addition, there are over 200 descriptive illustrations.

PART I As a brief **introduction** to the firearms, it's designed as an introductory reference to familiarize a new or non-shooter to the basics of shooting, with an initial emphasis on pistols. Part I may also be used as part of a beginner's introductory training course.

PART II Part two addresses "**Concealed Carry**", the things you should consider if you plan on carrying a firearm.

PART III Part three delves into **greater detail** about pistols, rifles and shotguns, answering many of the common questions of a new or non-shooter, and can serve as both a home study and training reference guide.

GLOSSARY The GLOSSARY offers **over 600 relevant terms** and bits of information that can make your introduction to firearms more understandable and more enjoyable.

The goal of this book is to provide a sound foundation to become a safe and confident shooter. A single book can not make you an expert, only extensive study, personal training courses and endless hours of practice may achieve that.

You'll notice in the text, a firearm is referred to in various terms, such as handgun, revolver, pistol, rifle, shotgun, etc..

These words, each time they are mentioned, should be a constant reinforcement of a firearm's deadly capabilities, raise your attention and instill a more cautionary approach to firearms. The more you are aware, the safer you become.

Any firearm, regardless of type or monicker, deserves your undivided attention, total respect and absolute control.

For example, to say this is "*... just a pistol*" or "*... just a rifle*" or "*... just a shotgun*" or "*... just a .22"* or "*... just a BB gun*" does not make them any less lethal — it only makes you more dangerous!

Instructors and Dealers

**This book was written for you,
as well as our respected firearm enthusiasts!**

Join the many professionals who are already using this book or portions of it, as a solid, easy-to-understand training reference.

Whether you are providing firearm *background*, *techniques*, *dry-fire* or *live-fire* training, you can apply this book's principles and resources for safe, effective learning progression.

This is your book!

Have an idea? — Suggestion? — Comment?
We'll gladly consider incorporating it into our next edition! Email us your thoughts! **Gary@FirearmFundamentals.net**

State Specific Editions

We've already released a number of updated editions that include State specific gun laws for Florida, Texas, Utah, Washington, Wisconsin and more.

If we don't have an edition yet for your state and you'd like your own state specific version — just let us know! Once we receive three or more requests, we'll compile a special edition just for you!

Wholesale Pricing!

As *Instructors* and *Dealers* you deserve a break for quantity purchases. You can realize market rate allowances just by using our official site: **www.FirearmFundamentals.net**
O*rder now* and we'll include ***Free Shipping*** on all orders!

Bonuses

Our book and web site also offers special allowances on products, training aids and NRA subscriptions.

Visit our site for vendor specials plus a selection of **FREE** downloadable targets, including our *MOA Correction* sight-in target system that even shows you how many clicks you need to hit center-target, regardless of distance!

Table of Contents

Crime and Criminals

A tremendous advantage to citizens who reside in states that allow concealed carry is, even though you may not practice Concealed Carry yourself, the bad guys don't know who is and who isn't a legally armed citizen. Which by association, means even the most ardent "anti-gun" or obsessed "gun-control" advocate still benefits from those who are legally armed!

The recent heartfelt tragedy at Sandy Hook Elementary School in Newtown, CT has once again fanned the flames of irrational, knee-jerk anti-gun rhetoric. Sadly, many politicians are using those innocent victims as aggrandizing fodder for their own agenda.

All of the self-righteous gun control proposals to date would not have stopped the abhorrent event at Sandy Hook. Even in the strictest "gun-control" cities of Chicago and Washington, D.C., gun violence is at it's worst. Over the past ten years Chicago has suffered *twice* as many gun deaths as our military in Afghanistan (Chicago murders: 4,265 versus military killed: 2,166)

Most analysts assert the 1994 "Assault Weapons Ban" had, at best, a nominal effect of gun violence, and had NO deterrent effect on the Columbine massacre which occurred during that ban (April 20, 1999).

Recently there is a resurgences by the gun-control advocates to again ban "assault weapons". To begin with, there is no accurate definition of an "assault weapon". The gun-control advocates categorize *anything* they don't like as an "assault weapon".

According to the most recent available Bureau of Justice Report[1], it was pointed out that of all the recorded criminal offenses, only 2% had a military-style semiautomatic gun or machine gun.

Further, according to a 2011 FBI Uniform Crimes Report[2], a person is 54% *more likely* to be killed with a hammer or other blunt object, than they would by *any* rifle, and more than *twice*

1 Bureau of Justice Statistics **Special Report**, Revised: 2/4/02, *Survey of Inmates in State and Federal Correctional Facilities*, **Firearm Use by Offenders**

2 Expanded Homicide Data Table 8: www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/tables/expanded-homicide-data-table-8

Firearms SAFETY

Safety — First, Last and Always!

There are four empirical rules for gun safety:

1) **ALWAYS treat every firearm as if it were loaded**
2) **NEVER point a firearm at anything you aren't willing to destroy (control your muzzle)**
3) **ALWAYS know your target AND BEYOND (where is the bullet going after it passes the target?)**
4) **NEVER put your finger on the trigger until after you have the target in your sights**

If you follow these rules, it will be IMPOSSIBLE to accidentally injure yourself or others!

These universal rules are advocated by our Military, Law Enforcement, National Rifle Association (NRA), Department of Natural Resources (Hunter Safety Programs) and all other organizations and establishments concerned with firearms safety.

There are other immutable safety concerns, such as:

ALWAYS CLEAR a firearm *EVERY TIME* you touch it.

Clearing a firearm includes visually and physically inspecting the firearm to insure there is no ammunition either in the chamber or the ammunition feed mechanism.

When you hand a firearm to someone, always make sure the action (which loads the firearm) is open, cleared and presented with the muzzle pointed away from the person.

Always wear appropriate eye and ear protection.

Also Be Aware: Even the lowly .22 rimfire bullet can be lethal up to 1½ miles away. And a centerfire bullet can still be *deadly at twice that distance!*

Many other important safety guidelines can be found in NRA safety literature, such as:

- Know how to safely use the gun
- Be sure the gun is safe to operate
- Use only the correct ammunition

Diagrams courtesy of Smith & Wesson

Some firearms may have more or less controls, buttons and levers. Always refer to the owner's manual specific to the firearm before proceeding to operate that firearm.

Often times owner's manuals are available on-line as a free download from the firearm manufacturer. If ordering by mail, the manufacturer may or may not have a minimal charge for a printed copy and shipping of the manual.

Primary Components of a Pistol

The primary components of a pistol are:

Barrel	**Action**	**Frame**
Muzzle	Trigger	Handle
Chamber	Hammer	Magazine
(or Breech)	(or Striker)	(or cylinder)

Rifling

One feature that is common to all handguns and rifles is what's called rifling or twist that are spiral groves cut into the inside of the barrel. (The exceptions are shotguns and some muzzleloaders.)

the chamber. If the round still resists seating, remove the offending round and try a different cartridge.

Of course a clean gun will help avoid these, and other problems.

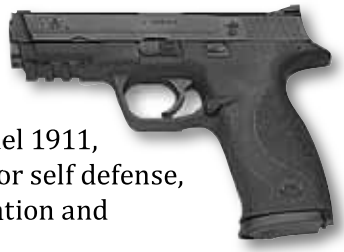
Please remember, *anytime* you are handling a gun,
always keep the muzzle pointed in a safe direction!

Unloading Jams

If a chamber is dirty or has a deformed cartridge, it may not freely eject the cartridge. Usually, just a little bit of judicious force will resolve the problem.

Semi-Automatic Operation

Semi-Automatic



First popularized at the turn of the century by the German Luger and a few years later by the U.S. Army's Model 1911, semi-automatics are commonly used for self defense, home security, concealed carry, recreation and selective competition.

Magazine

The magazine is what holds the bullets.
A magazine typically has a forward cant to it and bullets are loaded with the front of the bullet pointing to the front of the cant.

Load the magazine, making sure the cartridges flow freely inside the magazine and are all pointed in the correct direction. After loading a magazine, it is a good habit to hold the magazine horizontally, with all the bullets facing up, and tap the back of the magazine several times against the palm of your other hand.

The purpose of tapping is two fold:

1. To insure the base of all the cartridges are at the back of the magazine, which assures proper feeding and helps prevent jams;

not chambering entirely. Most often "*Tap, Roll & Rack*" will resolve the problem. Be aware, this may also be a potentially dangerous "hangfire"!

Tap, Roll & Rack

(Also referred to as *"Slap, Rack & Roll"* or just *"Tap-Rack"*) A general method of clearing a semi-auto pistol malfunction. The Process is to *"Tap"* (or *"Slap"*) the magazine, insuring it is properly seated, "*Roll*" the pistol to the right about 90^0 as the slide is cycled, letting gravity assist in clearing away the old cartridge and *"Rack"* or cycle the slide to both eject the old cartridge and chamber a new round.

Failure To Feed

Failure to Feed (FTF) is when a firearm fails to feed the next round into the firing chamber. This is most often the result of the magazine not being fully inserted and locked into position.

Quite often, *"Tap, Roll & Rack"* will resolve the problem.

Failure To Fully Chamber

Occasionally the slide will cycle and the gun will appear to be ready to fire again. However when the trigger is depressed, it does not fire. In this scenario, the new (loaded) cartridge has entered the chamber, but is not fully pushed forward and not completely seated in the chamber. The rear of the casing may be extended beyond the chamber just a fraction of an inch, preventing the slide to lock into position.

This is most often caused by either a dirty chamber or minutely disfigured cartridge (or both). Also, some semi-automatics just do not function well with certain types of ammunition.

1. With a firm grip on the firearm, your finger off the trigger (and safety on), rap the back of the slide with the heel of your other (weak) hand. This should move the slide forward sufficiently to completely chamber the round and lock the slide.
2. If this does not alleviate the problem, try once more.
3. If a second attempt also fails, eject the cartridge by pulling the slide fully back, then releasing the slide to slam forward and chamber a new round.

You can also *"Tap, Roll & Rack"* to resolve the problem.

cartridge case length, excluding the bullet itself (5.56x45, 7.62x51, 9x19).

On most revolvers, rifles and shotguns, the caliber or cartridge size is stamped on the side of the barrel. On semi-automatic pistols, it is often stamped either on the slide or on the exposed part of the barrel inside the ejection opening. On the shells themselves, you can find most caliber designations stamped on the base or bottom of cartridges.

Ammunition Malfunctions

Regardless of what you're shooting: semi-automatic; revolver; rifle or shotgun, they are all susceptible to ammunition malfunctions. There are three primary malfunctions types. In ALL cases, treat the firearm as loaded and keep it pointed safely down range.

Misfire

(Sometimes called a "dud") This is when the cartridge fails to fire after the trigger is pulled and the hammer or striker has impacted the primer. If the cartridge has not fired, still keep it pointed down range! — It may be a "Hangfire"!

Hangfire

This can be a **dangerous malfunction**, as the cartridge, after being struck by the firing pin, may pause or delay as much as 30 to 60 seconds before finally igniting and firing the cartridge. The danger is that the shooter, thinking the cartridge was a misfire, may point the firearm in an unsafe direction, only to have the firearm fire on it's own. (For a graphic demonstration, see: **www.youtube.com/watch?v=ulIWozPYIjs**)

Squib

(Sometimes thought of as a "dud") This condition is when the cartridge develops less than normal power and causes the bullet to travel down, but perhaps not out the barrel. If an expended bullet is lodged in the barrel and an attempt is made to fire another bullet, the result could cause personal injury or damage to the barrel.

An obvious indicator of a squib is that when the gun is fired, instead of the normal "bang" report, the sound is a softer "pop".

Should this happen, cease firing immediately. Unload the firearm and clear the chamber (while keeping the gun pointed down range).

If you shoot a .38 Special revolver and you happen to buy reloaded ammo, always check the cartridge base (bottom) to make sure says .38 Spl, *not* .357 Mag.

Dominant Eye

The "dominant eye" is your strong eye and will give you the greatest accuracy when sighting. Determining your dominant eye is fairly easy, just using your eyes and your thumb (no shooting is involved).

FIRST: Select a subject ("target") at any distance. It could be a wall switch, door knob, mail box, anything you can focus on.

SECOND: Give yourself a "thumb's up" and hold it at arm's length in front of you. Now, with both eyes open, place your thumb so it hides or covers-up the subject (i.e. door knob). While keeping both eyes open, begin to slowly draw your thumb toward your nose while still keeping the object (i.e. door knob) covered.

THIRD: As you move your thumb closer, continue to cover the object (i.e. door knob) with your thumb. At about 8"–12" your thumb will begin to veer either to your right or left eye as it continues to cover the object. While still covering the object, bring your thumb all the way to your cheek. Your thumb is now pointing to your dominant eye.

Sighting

Sight Alignment

Sight Alignment is placing the front and rear sight level with each other and centering the front sight equally between the two wings of the rear sight.

Sight Picture

Sight Picture is superimposing the sight alignment onto the center of the target. An aimed sight picture is the normal way to acquire and shoot at a target.

Focus on the front sight for the best Sight Picture, leaving the rear sight and target slightly blurry. (This is an "*aimed*" sight picture.)

If you have a gun case or holster, keep the firearm secured until you are actually ready to fire.

Once you have the firearm exposed, out of the holster or case, ALWAYS keep the muzzle pointed down range with your finger OFF the trigger. When the firearm is exposed and you are preparing to fire, or are tactically advancing, use the "SUL" or "Low Ready" hold. (see "Low Ready" on page 24)

Passing a Firearm to Another Person

Safety is of paramount concern and common sense is vital when passing any firearm to another individual. There are four basic steps in any firearm transfer:

1. Unload the firearm, including removing any magazine;
2. Open the action to visually verify the gun is empty;
3. As you pass the firearm, with the *open action*, always keep the muzzle pointed in a safe direction;
4. If you are the recipient, verify you have control of the firearm by saying "*I've got it*". If you're the person passing the firearm, don't let go of it until the recipient verifies they have it.

Also see "In the Field" on page 33 for safe methods of carrying a long gun in the field.

Holding a Pistol (Before Aiming)

The "Ready" positions allows you to have your firearm ready while you move about in self defense or a tactical advance. The advantage of keeping your firearm close to your body, as opposed to arms outstretched, is that it minimizes both the possibility of a bad guy taking your firearm from you and also reduces your profile, allowing you greater agility.

SUL — This is a method of safely holding a pistol while in the presence of others. First developed in Brazil for tactical officers, "SUL" is Portuguese for "south", the direction a muzzle should be pointed.

Low Ready — This is the most common, and preferred method of exposed firearm retention. The firearm is held by both hands, in a shooting style grip, with the elbows at

license fees helps support the DNR and other restorative projects. Private organizations such as Ducks Unlimited, Trout Unlimited and many, many others volunteer their time, expertise and financial resources to help improve our environment.

Every *responsible* hunter appreciates and respects the need for a clean, quick kill, with minimum suffering to the animal. And a *responsible* hunter will not take a shot unless he/she has reasonable assurance of a humane result.

Equally, those who fish also practice "catch and release" to both promote the sport and further preserve our wildlife.

All in all, thanks to legal hunting, fishing and associated programs, millions upon millions of dollars are generated to help preserve the habitat that we love, which ultimately benefits everyone, hunters and non-hunters alike.

In the Field

If you are hunting in a field and your gun is uncased, always practice safe carrying procedures. The ultimate goal of any carry method is to NOT have the muzzle pointed toward anyone or in an unsafe direction. Of course, the firearm's safety is always ON!

These methods are recommended in all hunter safety class. One way of remembering the various carries is to remember

T E C T S S

This simple abbreviation stands for:

Trail — **E**lbow — **C**radle — **T**wo-Hand — **S**houlder — **S**ling

As you can see by the illustrations **TECTSS** begins with the lowest carry and moves upward, ending in the highest carry.

Trail Carry — Grip your firearm firmly with one hand at the balance point. This carry offers poor control of your firearm should you fall. Be cautious in thick brush or high, dense grass as the low barrel is susceptible to getting plugged and creating a hazard. Use it when hunting alone or when others are behind you or to your side but not when someone is ahead of you.

Be sure the gun has a light coat of oil and if possible, leave the case open enough to allow ventilation. A good habit is to periodically check each gun every month or so.

Firearms Storage

Always be sure all arms are kept unloaded. Always store ammunition separate from the firearms. Before storage, it is recommended the gun be thoroughly cleaned and then protected with a light coat of oil. For long term storage, consider protective silica pouches.

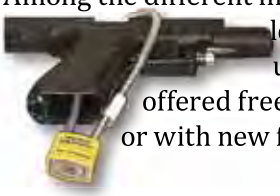
When at all possible, store all firearms with locks, or in lock boxes or floor standing safes.

Gun Locks

There are many ways you can protect your firearms. Some pistols now have locks built right into the pistol that prevents the firing action from engaging. However, these pistols when locked, are **not** an effective means of home protection. A more suitable consideration is a small lock box to secure your firearm.

Many factors must be considered when selecting a method of firearms protection, particularly when children are present. — ***Safety must always come first!***

Among the different methods of securing a firearm are cable locks and trigger locks, both usually under $5 and often offered free during safety promotions or with new firearms.



Gun Safes

Other means are small lock boxes that fit one or two firearms, often priced $50 to $150. These boxes can be used either in the house or secured in a vehicle. Some versions have exterior finger slots for a fast combination input while other more expensive versions are

Think Like a Criminal!

Chances are, you are an inherently honest person. Whether you're home or walking down the street, you're probably *thinking* like an honest person as well.
— *And that could be very dangerous!*

Criminals aren't like you. They have an entirely different mindset. They have absolutely no respect for the law — *so don't expect any law to deter them!* Further, they have no respect for you, or your property, and will take almost any risk, however unimaginable, if they feel it's to their benefit!

Example: An honest person may think that "security chain" on the door is a safety measure and will stop someone. — *Fat chance!* — If you were the criminal, would that chain stop you?

Try to visualize the myriad of different security breeches and personal threats that could occur, then develop a safe response to each of those scenarios.

Once you start thinking as a criminal would, and prepare yourself accordingly, you can much better protect yourself, your family and your home from harm.

Home Security

Make sure your home is secure. Locks and latches that function on doors and windows. Consider using blinds to allow privacy and not allow would-be burglars to view your possessions or determine if your home is empty.

Record all property ID numbers. Photograph all items of value. Maintain accurate firearms records. Photograph and document the firearm(s) make, model, barrel length, finish (blued, stainless), caliber and serial number. Place this record in a lockbox or have a digital copy.

Update frequently so there's a dated record of their condition. You may wish to keep a copy of your records off-site in case of a fire.

Keep the exterior of your home well illuminated. It's helpful to grow thorny bushes below windows as a deterrent, which may otherwise provide unauthorized entry.

• **Shall Issue** — Shall Issue entitles anyone that passes a background check, completes authorized training and registers and pays for a State permit, can be granted a Concealed Carry permit.

• **May Issue** — A "May Issue" is similar to a "Shall Issue" except it is the discretion of the local authorities (i.e. City or County Sheriff) as to whether a person is granted a permit. In some areas, such as Hawaii, although it is entirely permissible to issue a Concealed Carry permit, authorities flat out refuse to issue any permits.

• **No Issue** — Only Illinois and the District of Columbia practice this policy.

Concealed Carry Increases Your Safety

Even if you do not practice Concealed Carry for self protection or may be of the "anti-gun" mind-set, you still benefit by being in a State authorizing Concealed Carry.

According to a report by Representative Cliff Stearns ***"Concealed Carry Permits Are Life Savers"*** (01/26/2009)

*"In research sponsored by the **U.S. Department of Justice**, in which almost 2,000 felons were interviewed, 34% of felons said they had been "scared off, shot at, wounded or captured by an armed victim" and 40% of these criminals admitted that they had been deterred from committing a crime out of fear that the potential victim was armed."*

*"Allowing law-abiding people to arm themselves offers more than piece of mind for those individuals -- it pays off for everybody through lower crime rates. Statistics from the **FBI's Uniform Crime Report of 2007** show that states with right-to-carry laws have a 30% lower homicide rate, 46% lower robbery, and 12% lower aggravated assault rate and a 22% lower overall violent crime rate than do states without such laws. That is why more and more states have passed right-to-carry laws over the past decade."*

Castle Doctrine

The Castle Doctrine, also referred to as a Castle Law or a Defense of Habitation Law, affords the legal residents of a

your defensive reaction was a "trained response".(also see "Body Targets" on page 104)

Rules Governing Deadly Force

- You must reasonably believe you or another are in imminent fear of death or grave bodily harm.
- You must be an innocent party. (You can not start or escalate a conflict.)
- There are no means left of reasonable retreat. (Always retreat if at all possible. However a retreat should not place you in greater harm.)
- No lesser force will suffice to **stop the threat**. If you have the option of using a lesser force, you must use it.

Law Enforcement Deadly Force Criteria

Law Enforcement has very specific and restrictive criteria for the use of deadly force. It is important to realize, as a civilian, **you are not required, *nor should you* intervene in most criminal acts —**

You are NOT a cop!

Your *only* responsibility is to protect yourself and your family from imminent death or great bodily harm.

Having said that, a reasonable guideline for a civilian defensive response could emulate those criteria required for law enforcement. Following such criteria is also a good way to help minimize legal complications resulting from a defensive response.

Should I Use a "Warning Shot"?

Definitely not! — No known law enforcement criteria condones or promotes the concept of firing a "*warning shot*" *Don't do it!* — And where would that deadly stray bullet go?

Before Considering a Deadly Response

According to New York, Wisconsin and other State and local Law Enforcement training criteria,
ALL three of the following conditions must be present:

Firearm: Anything capable of death, or great bodily harm.

Keep in mind, these statistics represent highly trained and well experienced major city officers who practice incessantly to be the best shot possible under any circumstances. *How well do you think you would fair under similar circumstances?*

Some factors that influence accuracy are:

1. Distance to the target;
2. The size of the target;
3. Mitigating Conditions (i.e. public area versus no people);
4. Anticipation (emotional influence)

A "*Rule of 3*" guideline concludes that the vast majority of law enforcement confrontations occur within 3 yards, with 3 shots fired within 3 seconds (reference: NYPD SOP 9 data).

Disturbance Resolution

In the event you are confronted by an adversary or in a hostile situation, whether at home or outside of your home, try to practice these three criteria:

Observe — Assess — Act!

Observe — Always be alert and cognizant of your environment and the people around you. Be aware *anything* can be a weapon! — Even something a innocuous as a pen!

If you are away from home, be mindful of suspicious actions. Watch a person's posture, their eyes, where their hands are. Is there more than just one person — perhaps to your side or behind you? Is there a suspicious vehicle? At home, is there anything out of place? Strangers in the area? Odd noises?

Assess — Now that you've noticed something may not be right, determine what type of threat you may be dealing with, to what extent may the situation escalate, and what is the best, safest course of action. *Time is critical! – Don't waste it!*

Act — With a plan in mind, act with resolve! Usually you'll be much better off to ACT rather than to REACT. When you have to "react" it often means things have already escalated (or deteriorated) and you're now in a defensive role.

Often a potentially hostile situation can be avoided by a simple act, maybe turning away or walking on the other side of the

Part III — In Depth

Enjoy this third part at your leisure. This is a more in-depth look at the various aspects of firearms and their usage.

Intended as a personal study and reference guide, it's chock full of relevant, and occasionally ancillary information to broaden your knowledge, confidence and enjoyment of firearms.

Also be sure to check-out our comprehensive ***Glossary***.
It provides you with nearly 600 interesting and useful firearm terms that will help clarify many firearm topics and discussions.

Even when you're done reading this book, you may wish to keep this ***Glossary*** at close hand, as an easy-to-use source for answers to most common shooting questions.

In addition "Appendix Q — References" on page 331 provides over a hundred web sites to expand your resources.

For your convenience, a **Quick Reference Guide**, offering some of the most relevant shooting information can be found on the very **last page**.

Book Exclusive Selected Appendices are available as a **Free** downloadable, printable PDF, with live links, *only for our readers!* Go to: **www.FirearmFundamentals.net/More** and use our password **firearm** to open the document after downloading.

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Selecting a Defensive Pistol

Some factors to consider when selecting a defensive firearm:

Size — Both for comfort and conceal ability

Weight — Every ounce adds up and can matter

Ease of Use — The more simple, the better

Ammunition — Type, availability, cost

Caliber — Stopping power
(also see "Pistol Stopping Power" on page 101)

Capacity — The number of rounds it holds

Type of Pistol

First, try to decide how you are most likely to use the pistol: Self defense in the home; self defense as concealed carry; hunting; recreation or competition.

Each of these categories may be a defining factor in selecting an appropriate firearm and type of ammunition.

For example, if you plan to carry concealed on a daily basis, a light weight and smaller size would be a significant advantage, while home defense can justify a larger, heavier firearm (semi-automatics have become very popular for both self defense purposes).

If you plan on hunting, then greater accuracy and higher power are a likely requisite. Common choices in this category are revolvers or single shots with longer barrels.

Recreational use opens the door to just about anything, including muzzleloaders.

Competition shooting has a very defined gun criteria and you'd be best served by investigating the various types of competitions and base your selection accordingly.

Weak Hand

If you are anticipating using a firearm for self defense (i.e. carry concealed), it is definitely important to also practice shooting one-handed with your weak hand. There may be scenarios where your strong hand is unavailable and your only option is shooting with your weak hand. "**Stopping the threat**" is critical, no matter which hand is used!

The value of "practice" and proper training can not be overstated. This includes practice with both your "strong" and your "weak" hand. Many ranges offer self defense training. Training and practice is your best personal insurance.

Fanning the Hammer: Popularized by old westerns to fire a revolver repeatedly very fast. Doing so could cause damage to the gun and injure to your hand. For more info, see: "Fanning (the Hammer)" on page 206

Spousal Involvement

Not all folks are enthusiastic about shooting, and that's OK. If you can involve your spouse, shooting can be another common ground for interactive enjoyment, as well as extending a broader sphere of family safety.

Holsters

There are hundreds of styles of holsters. Selection is based on your individual needs. Holsters can fit almost every type of firearm, though not all holsters fit all firearms.

There are a few requisites that any holster should achieve:

- Provide good concealment;
- Retain the gun securely to prevent loss;
- Be comfortable enough to wear for long periods of time;
- Cover the trigger to prevent accidental discharge;
- Stay in place for a fumble-free draw;

Position Four

This position thrusts the firearm out and in front of you. Keep muzzle level. Thrust forward like a punch. Avoid scooping or diving with the firearm when thrusting forward.

This position, in a more relaxed form, is also used with the Weaver or Isosceles stance.

Smoother Draw: Do you want a smoother, lower friction draw from your holster? Try some "Pledge™" furniture wax sprayed onto the cloth or plastic material (may not work on some leathers). Wipe & let it dry before reholstering.

Using a Flashlight

The advantages of using a flashlight are obvious. The biggest disadvantage is your flashlight is like a neon sign identifying where you are and offering a very bright target!

Having a flashlight mounted on a firearm has its quite obvious pros and cons.

Holding a flashlight in your weak hand, and your firearm in your strong hand offers more versatility. There are several methods to this two handed practice.

FBI Hold: Your firearm is extended fully forward while the flashlight is held away from your body, either upwards, to the side or lowered. The concept being the bad guy will shoot at the light. Keeping the flashlight away from your body should increase your chances of survival.

Neck-Index Hold: Similar to the FBI Hold, except that the flashlight is held against your neck and jaw. This position can help illuminate your sights somewhat better than the FBI Hold. Be sure to hold the flashlight *behind* the plane of your eyes so that your light does not shine into your eyes, contracting your iris and diminishing your night vision capabilities.

Knife Components

Although most of the descriptors are self evident, a brief mention should be offered for the "tang" and the "fuller".

The "**tang**" is an extension of the blade's metal that serves as the core of the handle on a fixed blade (or sheath knife). Having the blade's metal extend into the handle adds balance, as well as considerable strength and durability. On folding knives, the tang is shorter, and the tang behind the pivot point of the blade often serves as part of the blade's locking mechanism.

The "**fuller**" is often erroneously called a "blood groove" or "blood letter", giving to the false idea that the long, indented groove makes it easier to withdraw the blade after stabbing. In truth, the "fuller" has no effect on blade withdrawal.

The actual purpose of the "fuller" is to reduce the blade's weight. Most effective with long blades, as swords, it can lighten a knife or sword as much as 35% without noticeably reducing the blade's integral strength.

Blade Designs

There are multitude of designs and permutations. Here are some of the primary designs:

A) Straight; **B**) Drop Point; **C**) Gut Hook; **D**) Trailing Point; **E**) Clip Point; **F**) Sprey Point; **G**) Tanto/Chisel; **H**) Americanized Tanto; **I**) Spear Point; **J**) Needle Point; **K**) Sheepsfoot; **L**) Wharncliffe;

Bullet Weight — In grains, determined by the bullet's width, length and material composition. There are 437.5 grains per ounce.

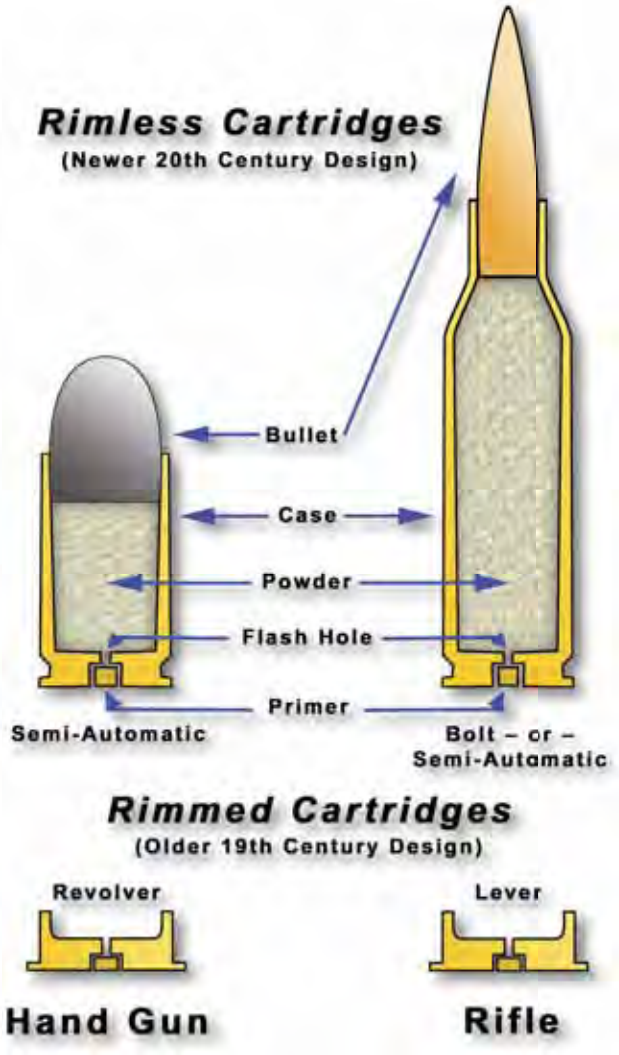
Bullet Physical Design — A compromise between aerodynamic efficiency and impact performance.

Bullet

The bullet is at the front of the cartridge and is what exits the firearm then impacts at (or near) the target.

Typically made of lead, many are jacketed with copper type covering to minimize fouling (or dirtying) the barrel.

A bullet is shaped like a cylinder with a generally rounded or pointed front end for impact. The front of the bullet that impacts the target may be pointed, rounded, blunt, flat or concave (hollow point). The design will



Dynamic Characteristics

Bullet Velocity — Rated as feet-per-second (FPS). The goal for many, especially those who reload their own cartridges, is to increase the velocity or speed of the bullet, which in turn, increases the impact force of foot-pounds (ft-lbs) and to some extent, increases the accuracy and range by minimizing bullet drop and wind drift.

As a reference, the speed of sound at sea level is approximately 1126 FPS or 768 MPH, or one mile in five seconds. The actual speed of sound will vary, typically lessening, based on lower atmospheric pressure, higher altitude, higher temperature and thinner air density.

If the goal is to lower a gun report or noise level (without a sound suppressor), then select a bullet with a velocity of about. 1,000 FPS or less. Much of the "noise" associated with a gun being fired is actually the crack of the bullet as it breaks the sound barrier. A bullet traveling at less than the speed of sound will not produce the sharp crack.

Bullet Energy — Loosely speaking, the energy of a bullet is the foot-pound energy (ft-lbs) created by the velocity (FPS) times the bullet weight (grains). Other factors, such as design, play into energy dissipation, but you can use ft-lbs as a reasonable guideline to the bullet's effectiveness.

Barrel Length — To a reasonable degree, the longer the barrel, the longer the gasses can push the bullet, and the faster and more powerful a bullet's force. In most rifles this is not critical, but for pistols, even an inch shorter barrel can reduce the bullet's potential power.

Below is an arbitrary example using the same cartridge, when shot from a rifle and various length pistol barrels.

Barrel	20"	6"	5"	4"	3"	2"
FPS	1800	1260	1197	1137	1080	1026
Velocity	*100%*	*70%*	*67%*	*63%*	*60%*	*57%*
Ft-Lbs	1200	600	570	541	514	488
Energy	*100%*	*50%*	*48%*	*45%*	*43%*	*41%*

CNS —Police and military are placing emphasis on targeting the Central Nervous System (CNS) which is following the spine, from about the head to mid torso. By compromising the target's CNS, the target can be immediately immobilized.

Pelvis — Another target area that has gained some favor is the pelvic girdle or hip (also called the "tranny") incapacitation shot. The concept is to break the hip and immediately immobilize the assailant. This is the preferred target area over a head shot. To effectively accomplish this, several things are needed:

1. A considerably accurate shot to the bone itself;
2. A fairly large, powerful bullet to shatter a hip bone.

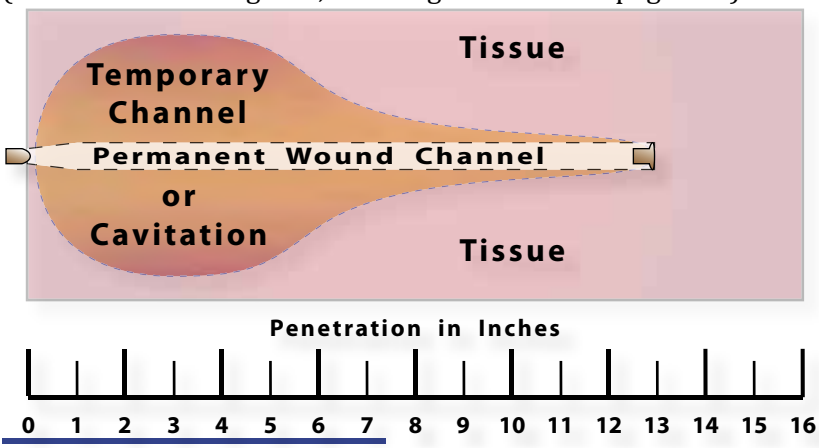
Again, remember, the FBI trains and advocates shooting at the "Center of Mass" no matter what that "Center of Mass" may happen to be (or what part of the anatomy is exposed).

Bullet Wounds[1]

Also referred to as "Terminal Ballistics".
There are four components of projectile wounding.

1) **Penetration**

How deep the bullet penetrates has a significant effect on the resulting "stopping power". A bullet must travel deep enough to come in contact with the vital areas. FBI Criteria requires at a minimum twelve inches, preferably up to eighteen inches of penetration to incapacitate the vital organs.
(For cadaver cooling rate, see ""Algor Mortis" on page 349)



1 U.S Department of Justice, Federal Bureau of Investigation *"Handgun Wounding Factors and Effectiveness"*

Although the mental make-up of the person being struck by a bullet may not have a direct relationship to the dynamics of a particular bullet, the mind set of the person shot plays a significant, if not overwhelming factor in the results.

A person can be mortally wounded and still aggressively continue their attack, almost undaunted, particularly if drugs or alcohol are involved. Which is why most government training programs assert as a defensive action, to keep shooting until the "threat has stopped".

By the same token, some people when shot, immediately loose their initiative to further press their assault, even when the wound is relatively minor. Realistically however, one should never expect this as an outcome in a self defense scenario.

Ultimately in a self defense situation, your *only* goal is to "**stop the threat**". A bullet may not, and need not be fatal, as long as it "**stops the threat**" long enough to allow you (and your family) to escape to a safe area.

Shotgun Ballistics

First off, shotguns, unless they are specifically dedicated for deer hunting, with rifled barrels, do not have any rear sights. Instead, they use a bright bead for a front sight. Some shotguns also have another bead about midway down the barrel, to help with visual alignment.

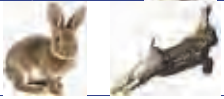
Shotguns are referred to in "gauge", such as: 10, 12, 16, 20 and 28. (The .410 is a "bore" size, not a gauge). Pellets are referred to as arbitrary numbers from #0000 to #12 (.38" diameter to .05" respectively).

NOTE: Number 12 shot is sometimes referred to as "dust".

Many popular pistol rounds are also available with this size shot, used for rats, snakes and alike. It should be noted that when shot from a pistol, their power is reduced by the short pistol barrel and the shot pattern expands dramatically as a result of the spin induced by the barrel's rifling.

As a result of these factors, the pistol's effective distance is limited to perhaps ten feet or less. If you are serious about using these cartridges, be sure to test them first for both range and effectiveness in the pistol you intend to use.

Matching the Shot to the Game

Shot Selection	Game	Shot Size	Choke	Max Range
	Moose, Elk, Deer, Boar,	Sabot	Fully Rifled Barrel	150 yds.
	Moose, Elk, Deer, Boar,	Rifled Slug	Rifled, Cylinder, Imp. Cyl., Modified	125 yds.
	Elk, Deer, Boar, Coyote	0000, 000, 00, 0	Cylinder, Imp. Cylinder, Modified, Full	50 yds.
	Geese	T, BBB, BB, B, 1, 2, 3, 4	Cylinder, Imp. Cylinder, Modified, Imp. Mod, Full	60 yds.
	Turkey	4, 5, 6	Full, Extra Full	55 yds.
	Duck	1, 2, 3, 4, 5, 6	Imp. Cylinder, Modified, Imp. Mod.	55 yds.
	Pheasant, Squirrel	4, 5, 6, 7-1/2	Imp. Cylinder, Modified, Imp. Mod, Full	55 yds.
	Rabbit	4, 5, 6, 7-1/2	Imp. Cylinder, Modified, Imp. Mod	50 yds.
	Grouse, Partridge, Dove, Woodcock	6, 7, 7-1/2, 8, 8-1/2	Imp. Cylinder, Modified, Imp. Mod,	45 yds.

choke you are using, the adjacent tables suggest the most effective pellet size at a given distance:

NOTE: The further away, the larger and heavier the pellet is required to retain the energy (but larger pellets also means fewer pellets. See pellets per ounce: "Shot Guide" on page 109)

Improved	Yards	15	20	25	30	35	**40**	45
Choke	Pellet Size	9	8	7.5	6	5	**4**	—
Modified	Yards	20	25	30	35	**40**	45	50
Choke	Pellet Size	9	8	7.5	6	**5**	4	—
Full	Yards	25	30	35	**40**	45	50	55
Choke	Pellet Size	9	8	7.5	**6**	5	4	—

Leading Your Shot

When shooting at a moving object (as with a shotgun), it is necessary to lead your target. As instantaneous as a bullet or pellets may seem to hit a target, there is actually a time lapse. If you aim directly at a moving target, by the time the bullet or pellets travel to the target, the target will have moved out of the bullet or pellet's path.

Leading the target is actually aiming in front of the target so the target moves into the path of the pellets or bullet.

There are two methods of shooting at a moving target:

One is a "*deflection*" shot, also called "*trapping*" by military snipers[2], where the gun is held stationary, aimed in front of the target and fired, without moving the gun, letting the target move into the bullet's or pellet's path (this is the preferred method used by long range snipers).

The other method is "*leading*" or "*tracking*"[2], that is to track or swing the gun with the movement of the

2 "Sniper Training and Employment", Dept. of the Army TC-23-14, 6/89

Rifle Advantages

Rifles are more effective at longer ranges. While most rifles are reasonably accurate from 100 to 300 yards, some rifles can be reasonably accurate out to 600 plus yards and a few rifles are accurate even to 1,000 plus yards. (A sniper rifle can reach out over 2,000 yards.) Some rifle advantages are:

- The chambering mechanism can be built stronger to accommodate more powerful cartridges.
- The longer barrel allows for more effective utilization of the powder charge.
- Being heavier, a rifle absorbs proportionately more recoil.
- The longer distance between the front and rear iron sight, known as the sight radius, provides a higher degree of accuracy. (see"Appendix C — Sight Radius" on page 267)

Bullet Spin: A bullet leaving the barrel of a modern rifle can spin up to 500,000 RPM.

The Mechanics of Long Guns

General Description (can apply to all rifles and shotguns)

① Heal (Butt)
② Toe (Butt)
③ Comb
④ Grip
⑤ Forearm
⑥ Safety
⑦ Action
⑧ Chamber
⑨ Barrel
⑩ Trigger & Guard
⑪ Magazine Well
⑫ Rear Sight
⑬ Front Sight
⑭ Muzzle & Crown
⑮ Sling Attachment

the gun against the shoulder and raise the barrel with each shot. This forces the shooter to re-aim after every shot, which takes valuable time and effort. (Note the pivot point dot at the butt of the stock.)

A more modern approach, which started gaining popularity in the 1950's, was to put the butt of the stock directly in-line with the axis of the barrel. In this configuration, the recoil transfers energy to the shoulder without pivoting the barrel upward. This design also helped reduce some of the felt recoil of the firearm.

Avoiding muzzle rise is especially important when employing rapid fire, which is the primary reason this configuration has gained popularity on semi-automatic rifles and military fully automatic rifles.

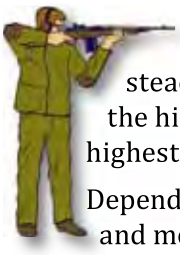
Another modern innovation is the use of synthetic stocks. These "plastic" stocks are quite durable, not subject to warping, easy to maintain and comparatively cheaper.

Regrettably, many civilians unfamiliar with firearms, presume any rifle with an in-line and/or synthetic stock is an "assault firearm". In truth, what they are witnessing is a 20th century design for all rifles, civilian and military.

Sighting In — See "Sighting In A Rifle" on page 151

Shooting Positions

For a rifle, you can use any of these shooting positions:



Standing; *Kneeling*; *Sitting*; *Prone*. The standing position is the least steady while the prone position offers the highest stability and hence, the highest accuracy.

Depending on circumstances, you may chose any stance and modify it to your preference.

In January of 2013 Winchester introduced their .17 Win Super Magnum rimfire cartridge, said to be the fastest rimfire in the world. The new cartridge is also touted to be exceptionally accurate, very flat shooting, with bullet drop and wind deflection about half that of the .17 HMR, while maintaining about double the energy and range.

The .22 and derivatives shown from left to right:
.22 CB, .22 Short, .22 Long, .22 Long Rifle, .17 Mach 2,
.22 WMR (Winchester Magnum Rimfire),
.17 HMR (Hornaday Magnum Rimfire)
.17 Winchester Super Magnum

Based on a blank case .27 caliber construction nailgun cartridge, it is necked down for a .17 caliber, 20 grain bullet, which achieves 3,000 fps muzzle velocity, which is faster than most .308/7.62x51 mm or .30-06 cartridges.

Currently, additional information on this cartridge is still being developed. However Winchester has released some details which as noted in a comparison below.

Cartridge	Velocity FPS			Energy Ft-Lb			Traj	Wind Drift	
Yards >	Mzl	100	200	Mzl	100	200	200	100	200
.17 Win Super	3000	2504	2058	400	278	188	–4.1	1.7	7.3
.17 HMR	2550	1901	1378	245	136	72	–8.5	3.3	15.3
.22 WMR	2250	1450	1011	337	140	68	–15.9	5.9	27.2
.22 LR	1400	1027	n/a	161	87	n/a	n/a	n/a	n/a

Trajectory: Rifle zero at 100 Yards — **Wind Drift Factor**: 10 MPH

Available in both 20 grain and 25 grain bullets, a box of 50 cartridges is projected to cost about $15.

Savage Arms is releasing a newly designed bolt action for this cartridge in the Spring of 2013 for about $349 while two other arms manufactures will release their editions later in the year.

triangle), the bullet will only cover a little over 200 yards straight forward (the bottom distance [A] of the right triangle). In this case, the actual bullet's drop is based on the 210 yards distance straight forward [A], *not* the distance of the angle upward (or downward) [C].

The difference can be crucial! *For example*, if you were shooting a popular .30-06 caliber rifle with a zero at 200 yards, using the correct 210 yard distance [A], you would aim at the center of the target.

However, if you used the 300 yard diagonal distance [C], and compensated for the anticipated bullet drop at 300 yards, you would actually be shooting high, by about 9" to 10" — and you could completely miss your target!

Temperature

Temperature, or more specifically, air density, can also affect the trajectory of a bullet. The thinner the air, either as a result of higher temperature or higher altitude, the less air resistance to the bullet. With less air resistance, the bullet will maintain a faster speed, translating into less time for the bullet to succumb to the effects of gravity.

Simply stated, without altering the sights, the higher the temperature, the higher the bullet will strike the target. The lower the temperature, the lower the bullet will strike.

Every 20° temperature variation affects the bullet velocity by about 50 feet-per-second, which in turn changes the vertical impact by one MOA.

The following table illustrates the temperature effects when a rifle is sighted in during a standard 70° Fahrenheit day.

Note: This table only reflects the variations in MOA impact *due to temperature* and does NOT account for atmospheric pressure or bullet drop by range. First determine the bullet drop for your particular cartridge at a specific range, then factor in the MOA temperature variation from the table below.

If you need to know the MOA distance in INCHES, use:
R x MOA = INCHES (examples: *3 x 2 = 6"* - or - *8 x 9.23 = 73.84"*)

Determining Wind Speed

A rough guide for determining wind speed is to estimate the angle a flag stands off the staff. *For example*: in a light wind, the flag may drape just a few degrees away from the staff, but in a stiff wind it may fly almost straight out.

In the light wind, the flag's deflection away from staff may only be **20°**, but in a stiffer wind it could be waving at about **60°**.

The formula to use is: **D ÷ 4 = V**
meaning **D**eflection (in degrees) **÷ 4** = Wind **V**elocity (MPH).

Using the two above examples:

20° ÷ 4 = 5 MPH — and — **60° ÷** 4 = 15 MPH

Don't have a flag? Just drop some grass or a piece of cloth, then estimate the *angle* (not distance) between you and where the grass or cloth lands. You can also use an anemometer. (Several are available for under $50.)

Also see "Wind Speed" on page 260

NOTE: The exact value of wind drift compensation is predicated on the specific characteristics of each bullet (caliber, weight, design coefficient, velocity, etc.). Hornady, Remington, Winchester and several other web sites offer calculation pages that factor in your particular bullet, it's bullet drop and wind deflection. (for web site addresses, see "Appendix Q — References" on page 331)

Sight Radius

When using iron sights, the farther the distance between the front sight and the rear sight, the more accurate a person's aim will be. That distance between the front and rear sight is called the "sight radius".

To illustrate the dramatic effect of just ⅛" deviation in sight alignment we'll compare a 4" pistol sight radius versus a 26" rifle sight radius.

during very dim light, with 5mm being the accepted average for normal daylight. This dilation of the eye's iris affects the sighting of both iron sights and telescopic sights.

Just like the aperture of a camera, the smaller the opening that admits light, the more expansive the range of acceptable sharpness. This effect is known as "Depth-of-Field" (DOF). This DOF range retains roughly a 1 to 2 ratio of acceptable sharpness, one unit of acceptable sharpness in front, to two units of acceptable sharpness behind the actual point of focus.

Why is it said "unit of distance"? Well, the relationship is based on relative ratios and not locked into specific inches or feet. The physical distance of the DOF will vary greatly depending on how far the actual point of focus is *and* the relative brightness. A few examples might help:

Example 1: Let's say you're shooting a pistol with your arm extended. The front sight, as your focus point, is 28" away.

Example 2: Let's say you're shooting a rifle. Now your front sight, as your focus point, is 42" away.

Here's an arbitrary illustration of how the range of acceptable sharpness (DOF) can change in these examples:

Examples	***#1 — Pistol***			***#2 — Rifle***		
Acceptable Sharpness	Near	**Focus**	Far	Near	**Focus**	Far
Dusk/Dawn	27"	**28"**	30"	40"	**42"**	48"
Normal Day	24"	**28"**	36"	32"	**42"**	72"
Very Bright Day	20"	**28"**	48"	24"	**42"**	96"

Please note these two important variances:

A) Comparing the pistol and rifle, when the point of focus is farther away, the physical DOF distance increases;

B) As the light gets brighter, the relative DOF also expands to cover a greater near-to-far physical distance.

That's why, on a normal day, it can be easier to define the rear sight of a pistol than the rear sight on a rifle.

And why, on a bright, sunny day, everything can seem pretty sharp and it's much easier to sight.

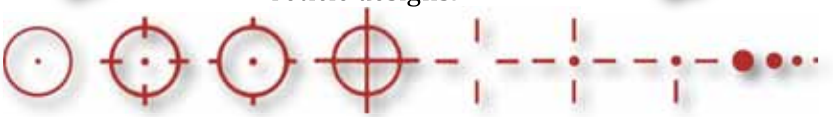
rifle scopes, the higher the magnification, the dimmer the image and the shakier the sight picture. Usually 1x to 3x magnification is the most convenient. Although a larger front objective is visually better, weight is also a factor. Be sure the eye relief is adequate to allow your arms to stretch out in front of you with the pistol.

Red Dot or Reflex Sights — Because these sights only need one point of reference, they are often a preferred sight system for very fast target acquisition. (Also see "Reflex or "Dot" Sights" on page 155)

These sights also offer unlimited eye relief, allowing placement at any distance on the barrel, which can be a significant advantage to anyone who might use corrective glasses. Both types of sights are only available as 1x (no) magnification power.

Red Dot Sights — These typically look like miniature rifle scopes. Since there is no magnification factor, 25 mm or 30 mm lens diameter is most common.

Reflex or Holographic Sights — These sights are similar in concept and function, though often at a higher cost. Many of these sights offer a choice of red or green colors as well as a built-in selection of various sight reticle designs.



Laser Sights — Laser sights emit a red or green beam that can be seen on the target and represents the point of bullet impact. These are the only style of add-on sights that may be used comfortably during concealed carry. Brightness is measured in milliwatts (mw), or thousandth of a watt. A reasonable laser sight power rating would be 5 mw.

Laser sights are commonly either a red beam, usually 635 nm or a green laser, usually 532 nm. A green laser sight has the advantage of being easier to see in brighter light.

Cleaning Your Firearm

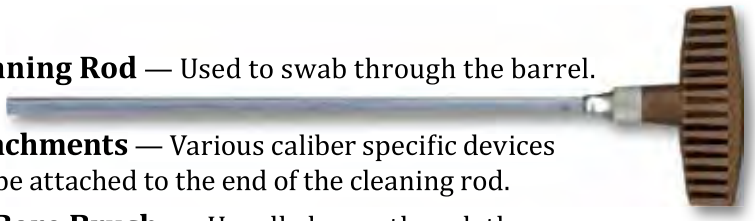
Cleaning Objectives

1) *Always be safe* — Make sure your firearm is cleared
2 Get everything clean
3) Protect everything from rust
4) Maintain the firearm in safe working order

Note: Everyone has their own style of cleaning, with their own nuances. Regardless of your methods, as long as you meet these listed objectives, you should be fine.

Equipment — To effectively clean you gun, you'll need a few items, which can be bought separately or as a kit. Starter kits can be found for less than $10, while more elaborate kits can cost up to $50 or more. (The average investment is usually $10 to $20.)

Cleaning Rod — Used to swab through the barrel.



Attachments — Various caliber specific devices can be attached to the end of the cleaning rod.

Bore Brush — Usually brass, though there are some steel ones available, brass is generally recommended. Used to scrub out deposits from the inside of the barrel.

Patch Holder — Often shaped with an eyelet to allow a patch to be held. The patch is dipped in a bore cleaner and used to swab the inside of the barrel.

Jag — Often shaped like a plug. This is used to assertively push a cleaning patch through the barrel.

Patches — Often soft cotton, but could be flannel or other absorbent material. Most often used to swap and clean the inside of the barrel, as well as other firearm parts.

They are sized commensurate to the caliber of the barrel. For example, for .17 to .25, about 1 ¼" square, for .27 to .45, about 1 ¼" x 2 ¼", for shotguns, about 2 ¼" square.

Media Misnomers

One of the frustrating things for shooters of all levels is the way the media, including news, TV and movies, as well as many political figures, grossly misrepresent firearms and the responsible shooters. These are just a few of the things that are popularly misrepresented:

Movies and TV

No Recoil?

Firearms have a recoil, which typically pushes the muzzle (the front of the gun) up and back after each shot. This requires re-aiming for each subsequent shot. In the movies and on TV there typically is neither any recoil nor time needed to re-aim the next shot. (It's a laughable misrepresentation!)

Hundred Round Revolvers

The old cowboy westerns provided their hero with hundred round revolvers, firing shot after shot with nary a reload (actually revolvers in the old west only safely held five rounds). That tradition has continued to this day with hundred round pistols and thousand round machine guns. You see it all the time in the entertainment media, they just keep shooting and shooting and shooting.

For reference, most high capacity magazines for pistols hold an average of about 16 rounds. Revolvers hold 5 to 8 rounds.

Most hand held machine guns (sub-machine guns or machine pistols) usually hold 20-30 rounds, rarely more than 50 and their rate of fire is 500 to 1,200+ rounds per minute (8 to 20 rounds per second). Realistically, they'd run out of ammo in the first two seconds!

And let's not forget the weight of the ammunition. A hundred rounds of common .45 ACP (used in the Thompson sub-machine gun and others) weighs almost five pounds To hold enough ammunition for barely a one minute burst could require carrying over 50 pounds of ammo!

No Collateral Damage?

So often in the movies and on TV there is an unfettered gunfight in a busy street, yet no one or no object behind the target is

GLOSSARY

For your convenience, a **Quick Reference Guide**, offering some of the most relevant shooting information can be found on the very **last page** of this book.

A

Accidental Discharge

An unintentional firing of the gun which is caused only by mechanical error. If mechanical error was not the cause, it is a negligent discharge.

ACP

Stands for "Automatic Colt Pistol." Used to designate certain cartridges first chambered in Colt automatic pistols
Examples are: 25 ACP, .32 ACP, .380 ACP, .38 ACP, .45 ACP

Action

The mechanism of a firearm directly behind the barrel, by which a gun cartridge is loaded, locked in place, fired, unlocked, extracted and ejected. Various types include single shots, multi barrels, bolt actions, slide or pump actions, lever actions, revolvers, semi-automatics and automatics.

Action Shooting

A generic term for a variety of shooting games usually characterized by extreme speed of fire, relatively powerful handguns, medium to large targets and short to medium ranges. Often called "Combat Shooting." IPSC-style competitions, bowling pin and falling plate matches are all typical of this type of shooting.

Airgun

Not a firearm but a gun that uses a compressed spring, compressed air or CO_2 to propel a projectile. Examples: BB gun, pellet gun, CO_2 gun.

Ammunition

This typically refers to a complete pre-assembled cartridge comprised of a projectile, case, propellant and primer. These are commonly referred to as: cartridges, rounds or shells.

It may also refer to a stand-alone component such as BBs or pellets.

Ammunition, Fixed

"The term "fixed ammunition" is used to differentiate a self contained cartridge from components inserted separately in muzzleloaders.

Appendix A — Gun Safety Cards

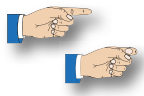
These Gun Safety Cards are yours. You can cut them out and carry them with you, make copies and share them with friends.

***Illustrated* Gun Safety Rules**: These important rules use a visual reference to help the new shooter remember. First, create a "*finger gun*" by making a loose fist and pointing with your index finger.

Rule #1 — Point your *finger gun* Up
- Always treat every gun *as if it were loaded*!

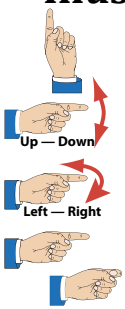
Rule #2 — Swing your *finger gun* Up & Down
- Always know your target and *beyond*!

Rule #3 — Swing your *finger gun* Left & Right
- Always point the *muzzle in a safe direction*!



Rule #4 — Squeeze and release your *finger gun*
- Always keep your *finger off the trigger* until the target is in your sights!

Illustrated Gun Safety Rules



Always treat every gun *as if it were loaded*!

Always know your target and *beyond*!

Always point the *muzzle in a safe direction*!

Always keep your finger *off the trigger* until the target is in your sights!

Additional Gun Safety Rules

- **Always clear a firearm *every time* you touch it!**
- **Always wear appropriate *eye and ear protection!***
- Always use only the *correct ammunition*!
- Always wash your hands and face in *cold water*!
- Always transport a firearm in the trunk, *unloaded*!
- Always store a firearm *inaccessible* to children!

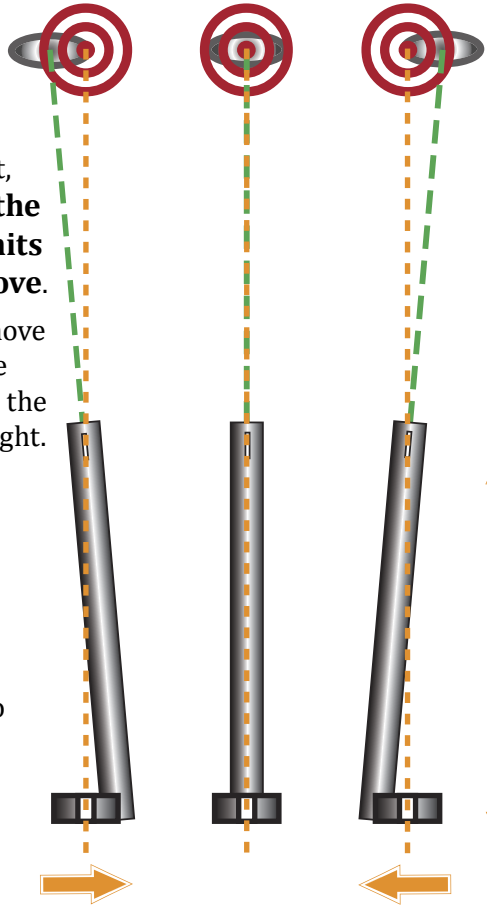
Appendix B — Rifle Sight–in

Sight Adjustment

Standard Rear Sight Adjustments

To correct a bullet's impact, **move the rear sight in the same direction as the hits on the target *should* move**.

For example, if you want move the bullet impact left, move the rear sight left. To move the impact up, raise the rear sight.

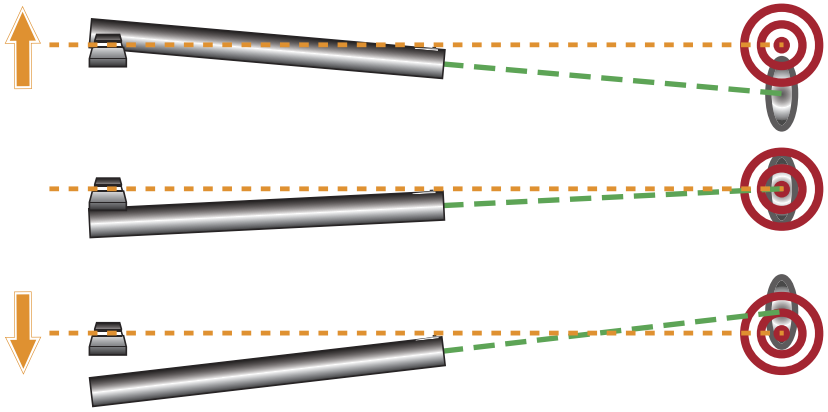


Front Sight Elevation

If you are using a rifle that uses the front sight for elevation correction, then the method is reversed.

For front sight elevation, to raise the impact, move the front sight down.

To lower the impact, move the front sight up.



Sight-in Log

Name:	Date:	Time:	Gun	Sight
Location	Wind (direction/speed)	Temperature	Elevation	Humidity
Caliber	Bullet Weight	Design	Mfg	Type

Volley #1 Note	Distance	# Shots Fired	Impact (? O'Clock)	Dist Off Center	Elevation Clicks	Windage Clicks
Volley #2 Note	Distance	# Shots Fired	Impact (? O'Clock)	Dist Off Center	Elevation Clicks	Windage Clicks
Volley #3 Note	Distance	# Shots Fired	Impact (? O'Clock)	Dist Off Center	Elevation Clicks	Windage Clicks
Volley #4 Note	Distance	# Shots Fired	Impact (? O'Clock)	Dist Off Center	Elevation Clicks	Windage Clicks

Appendix C — Sight Radius

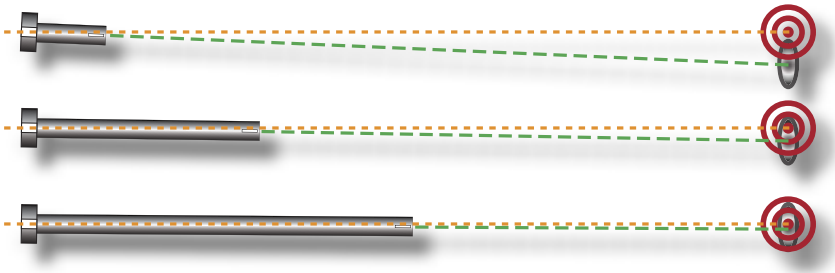
"Sight Radius" only applies to iron sights, not optics.

The sight radius is the **distance between the back sight and the front sight**.

The greater the distance between the front and rear sights, the more inherently accurate the results of aiming.

For example — A **1/8" sight misalignment,** aiming at typical target distances, with a given barrel sight radius, results in:

Sight Radius	Error @ 50'	Error @ 100 Yds	Error @ 300 Yds
4"	18.8" off target	9.4 ft. off target	28.2 ft. off target
8"	9.4" off target	4.7 ft. off target	14.1 ft. off target
16"	4.7" off target	2.3 ft. off target	7.0 ft. off target
26"	2.9" off target	1.4 ft. off target	4.3 ft. off target



The following table demonstrates how different sight radius distances affect bullet impact at various distances.

The expressed values are based on a 1/8" aiming error or deviation. A 1/4" error/deviation would result in an impact error twice the value expressed, while a 1/16" error/deviation would result in an impact error of half the expressed value.

Appendix D — MOA

Minute of Angle
(or **Minute of Arc**)

It will be necessary to know the value of each "click" of your sight adjustment. Most sights use either:

1/8 MOA per click	1/4 MOA per click
1/2 MOA per click	1 MOA per click

Use the adjacent tables, for scopes and aperture sights to determine correct adjustments at various given target distances.

A) The number of clicks needed to move the impact one inch

B) The amount of change, in inches, for each click;

C) The area a red dot or reflex sight masks at a given distance

D) Converts the physical distance off target center, in inches, to the MOA at a given yardage

Using Our *MOA Correction* Sight-In Target

You can use this table information in conjunction with "**Firearm Fundamental**'s Copyrighted *MOA Correction* sight-in target.

To use the *MOA Correction* sight-in target, set the target any distance from 25 yards to 1,000 yards from your shooting bench.

After a three or five round volley, measure the distance between the bullet impact and the center of the target.

The table will convert the distance off target center, in inches, to the relative MOA for that distance. The adjacent table will then convert the resulting MOA into the number of clicks needed, for your sight, to impact the target center.
(Also see "Appendix E — MOA Correction Target" on page 271)

Our *MOA Correction* sight-in target and complete instructions are available FREE from our web site:

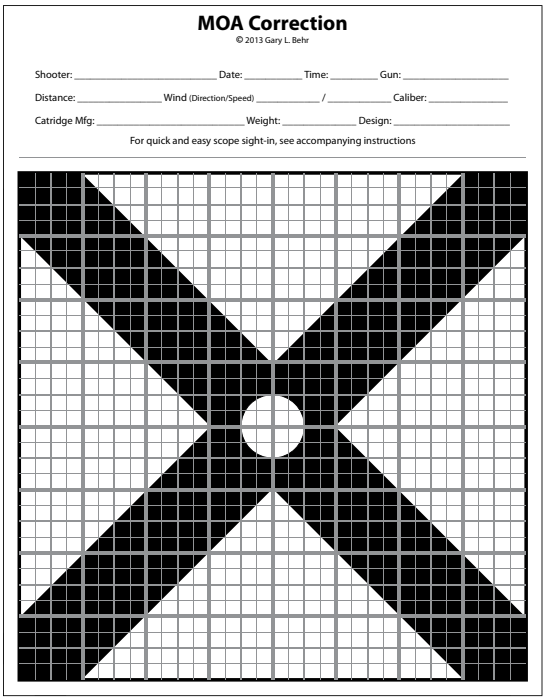
www.FirearmFundamentals.net/More

Appendix E — MOA Correction Target

MOA Correction Sight-In Target for Rifle

The MOA Correction target shows the extent of bullet impact error when aiming at the center of the target and allows quick and accurate aim correction regardless of the shooting distance.

A free download of this full size target, along with instructions and associated tables is available at: **www.FirearmFundamentals.net**



This target displays a cross-grid with quarter inch to one inch divisions and uses those divisions to determine relative Minute-of-Angle.

Once you know the Minute-of-Angle, it allows for easy impact correction using the clicks of your scope sighting adjustment.

Using the Minute-of-Angle to correct the impact creates a common measurement, regardless of the distance to the target, and also corresponds to typical scope adjustments.

The included Minute-of-Angle table converts the physical impact error (in inches) into a Minute-of-Angle (MOA) value. The Scope Clicks per Minute-of-Angle Correction then provides the suggested the number of clicks needed to reposition the impact to the center of the target.

Appendix F — Hunter Education

Hunter Safety Requirements by Date, by State
homestudy.ihea.com/abouthed/06requirements.htm

Hunter Education Requirements for Hunting, by State
www.ihea.com/hunter-education/hunter-education-requirements.php

Wisconsin Course Requirements
dnr.wi.gov/org/es/enforcement/safety/coursereq.htm

Hunter Safety teaches the *Four Rules of Gun Safety* as: **TAB-K**

T = Treat every firearm as if it is loaded.
A = Always point the muzzle in a safe direction.
B = Be certain of your target and what's beyond it.
K = Keep your finger outside the trigger guard until ready to shoot.

On-Line IHEA Lessons
homestudy.ihea.com

These are on-line Hunter Safety lessons. They are not a complete hunter education course and do not, in themselves, meet international hunter education standards. Additional personal instruction, personal skills evaluation and student knowledge are required to comply with these standards.

If you intend to take an official hunter education course, check with your state, province or territory agency responsible for your local hunter education (typically the Department of Natural Resources) to enroll in their official hunter education course. (Course is accepted in Wisconsin.)

The on-line reference can serve three functions:

1. *Just Browsing*: People interested in hunting can learn more about hunting.
2. *A Head Start*: People about to take a hunter education course can get a head start before their official hunter education class.

Appendix G — Heart Placement

Heart Placement, Animal

A good hunter respects nature's game and will not take a shot unless he or she is reasonable sure of a quick, clean, humane kill.

It's important to now your game, and where to aim for a clean kill — Also know *your* limitations.

Head shot should be avoided. A smaller target is harder to hit and a slight miss can cause immense suffering, without a kill.

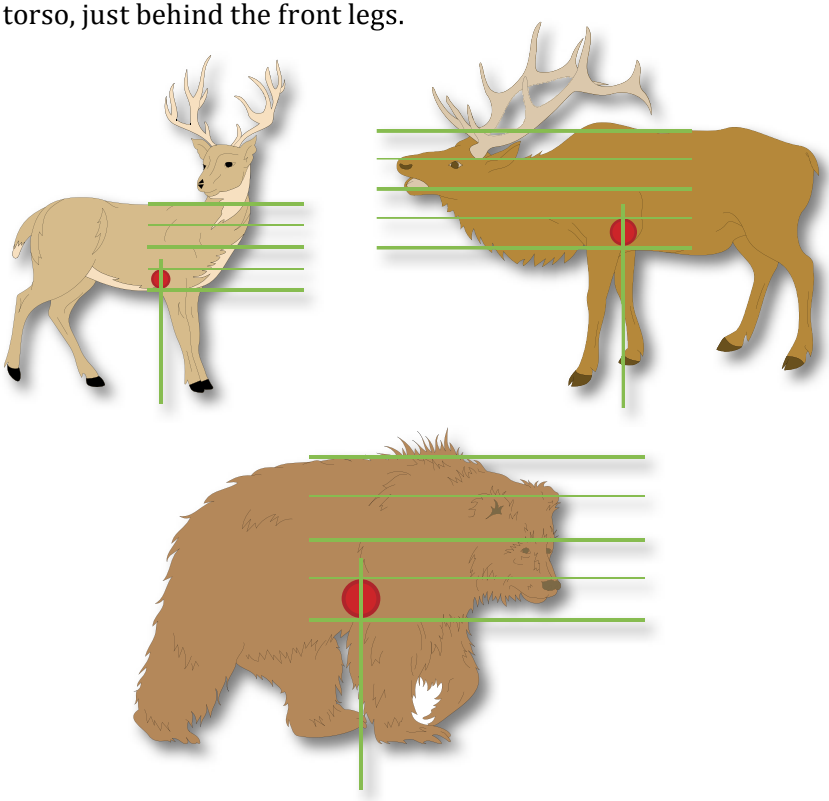
Gut shots may work, but they are cruel, extremely painful, often causing prolonged suffering and may contaminate edible meat.

A **lung shot** will eventually kill the game but it extends the suffering and is not as humane. Often requires extended tracking.

A **heart shot** is generally considered the quickest kill.

It is very important to know your game's physiology.

Generally, the heart is in the lowest vertical quadrant of the torso, just behind the front legs.



Heart Placement, Human

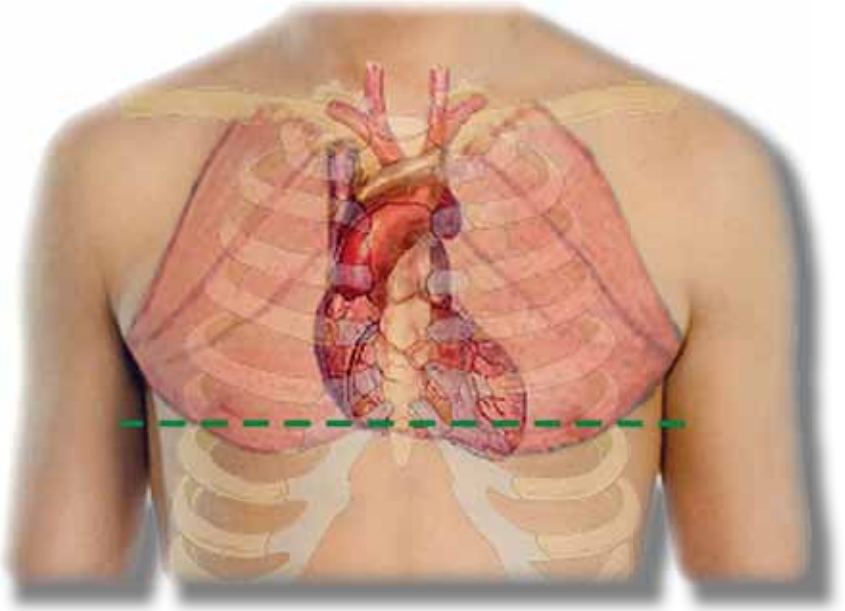
Contrary to common belief, the majority of the human heart lies in the center of the chest, not on the left, and is primarily positioned behind the sternum.

The heart also lies between the pectoral (major) chest muscles. (see illustration below)

Another method of visualizing where the heart is located, is that it rests on top of an imaginary line drawn between the nipples of a male (dashed line in illustration.)

In a self defense scenario, targeting the center of the chest, anywhere between the base of the pectoral muscles and the collar bone will likely result in a fatal impact.

Bear in mind that a shot to the heart may NOT be immediately incapacitating. An assailant can still continue to press an attack for another 10 to 15 seconds *after* the heart is destroyed.



These targets and more are available FREE at our web site:

www.FirearmFundamentals.net/Targets

Appendix H — Cartridge Interchangeability

Information courtesy of Remington Arms and other sources.

Substitutions other than those listed should not be made without the specific recommendations of the firearms manufacturer. Improper combinations could result in firearms damage or personal injury.

A number of cartridge substitutions allows for older and less powerful cartridges to be used in more modern chambers capable of tolerating higher pressures, such as using a .38 Special cartridge in a .357 Magnum chamber.

However, because of the significant pressure differences, higher pressure cartridges should not conversely be used in the lower pressure chambers.

To bring attention to this concern, higher pressure cartridges are highlighted in bold, as a reminder of the one-way only adaptability. Notations are also provided for distinct circumstances.

***** Ammunition with **+P** (or **+P+**) on the case headstamp is loaded to higher pressure can only be used in firearms designated for this cartridge and recommended by the gun manufacturer.

Rimfire

~~~~~~~~~~~~~~~~~~~

.22 Short

.22 CB

.22 Long

.22 Long Rifle

(In most cases, these cartridges are interchangeable. However some firearms will only accept a single designation.

Generally, those acceptable designations are marked on the side of the barrel. None of these cartridges are compatible wit the .22 calibers listed below.)

~~~~~~~~~~~~~~~~~~~

.22 W.R.F. (Winchester Rim Fire)

.22 Remington Special

.22 Win. Model 2890

.22 WMR (Winchester Magnum Rimfire)

(The first three cartridges can be used in the .22 WMR, but not conversely.)

~~~~~~~~~~~~~~~~~~~

Center Fire

.25-20 Remington

.25-20 W.C.F.

.25-20 Win.

.25-20 Win. High Speed

.25-20 Marlin

.25 W.C.F. (Winchester Center Fire)

~~~~~~~~~~~~~~~~~~~

6mm Rem. (80 & 90 grain)

Appendix I — Practice Target

5” Circle

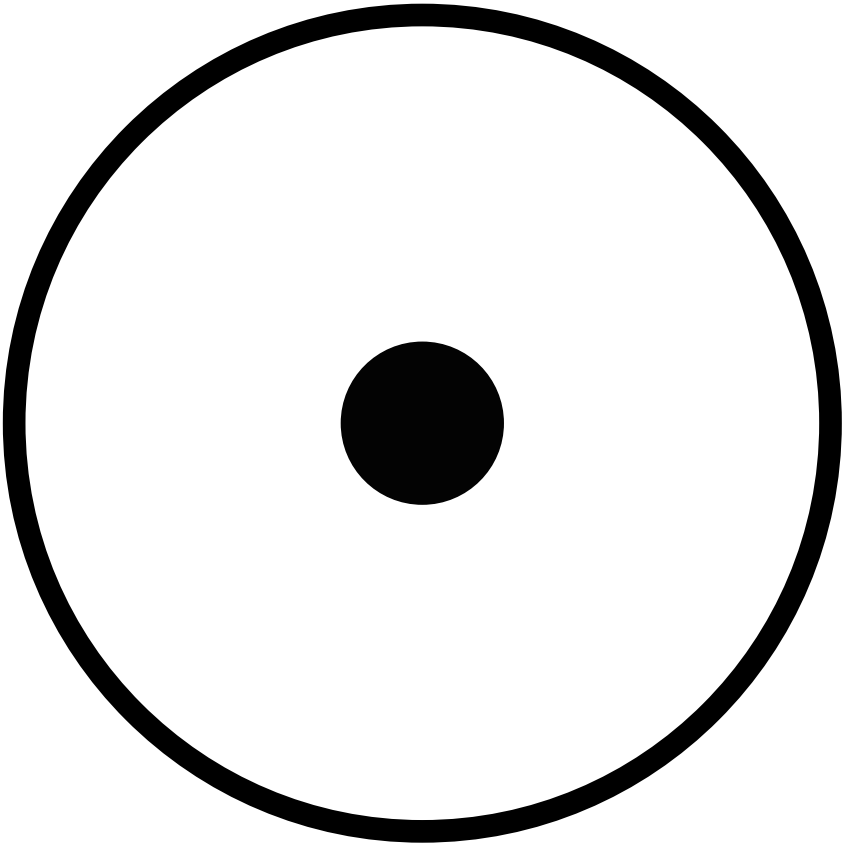
This 5” circle represents the vital human target area (heart and lungs) in a self defense scenario.

This and many more *free* targets are available at:

www.FirearmFundamentals.net/targets

Make some copies and have fun!

(For a full size 5” diameter target, enlarge this image by about 115%)



Appendix J — Bullet Placement Corrections

Bullet Placement for Right Hand Shooters

Use this as a **Right Hand Shooter's** reference or reprint this and use it as your actual target.

Appendix K — Practice Exercises

Live Fire

Always Practice Safe Habits

Rule #1 — Always treat every gun as if it were loaded!
Rule #2 — Always point the muzzle in a safe direction!
Rule #3 — Always know your target and beyond!
Rule #4 — Always keep your finger off the trigger until the target is in your sights!

- Always clear a firearm every time you touch it!
- Always transport a firearm in the trunk, unloaded!
- Always store a firearm inaccessible to children!

When Shooting

- Always wear appropriate eye and ear protection!
- Always use only the correct ammunition!
- Always, always keep the muzzle pointed down range!
- Always wash your hands and face afterwards in cold water!

Targets

A good practice target is a 5" circle. The 5" represents the typical critical mass area of an assailant. A copy of this target can be found in Appendix E, "5" Circle" on page 280.

Another especially cheap but effective target is a plain paper plate, found at any grocery store. Common sizes are 6" and 9". Cost can be as little as about a penny a target.

***FREE* TARGET DOWNLOADS!**

Our web site offers FREE downloads of two dozen different targets you can print right at home or in your office:

www.FirearmFundamentals.net/targets

Sources for other targets can be found in Appendix R — "Targets" on page 335

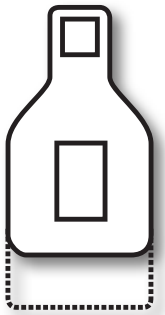
Pistol Exercises

Exercises Distances: All distances are 5' – 10' – (unless specified otherwise). For both safety sake and for personal evaluation, **always begin your**

The New FBI Qualification Course

The FBI has studied thousands of shootings and determined the majority of gunfights occur at seven yards or less. As a result, in January of 2013, the FBI changed its qualification from shooting at far distances, up to 50 yard, to close quarters shooting.

- The new course consists of a total of 60 rounds.
- Each round counts as one point
- Any hits inside the target area count
- You must draw from concealment for every string of shots
- Passing score for Agents is 48 out of 60 (80%)
- Target used is the QIT-99



Stage 1: *3 yard line* (total of 12 rounds)

- 3 rounds in 3 seconds using your strong hand only
- 3 rounds in 3 sec onds using your strong hand only
- 3 rounds using strong hand only, switch hands, 3 rounds using support hand only all in 8 seconds

Stage 2: *5 yard line* (total of 12 rounds)
from this point forward, all shooting is with two hands)

- 3 rounds in 3 seconds
- 3 rounds in 3 seconds
- 3 rounds in 3 seconds
- 3 rounds in 3 seconds

Stage 3: *7 yard line* (total of 16 rounds)

- 4 rounds in 4 seconds
- 4 rounds in 4 seconds
- Magazine reloaded (four rounds)
- Fire four rounds, reload, fire four rounds in 8 seconds.

Stage 4: *15 yard line* (total of 10 rounds)

- 3 rounds in 6 seconds
- 3 rounds in 6 seconds
- 4 rounds in 8 seconds

Stage 5: *25 yard line* (total of 10 rounds)
(This stage involves the use of a barricade/cover)

- Move to cover and fire 2 rounds standing, then 3 rounds kneeling all in 15 seconds
- Move to cover and fire 2 rounds standing, then 3 rounds kneeling all in 15 seconds [end of qualification]

Appendix L — Dry Fire Training

Home "dry-fire" training is essential for maintaining a safe, responsive environment. It not only allows you to acquire and maintain familiarity with your sidearm, it also allows you to adapt and take advantage of your home's unique defensive environment.

During this training, at NO TIME is there an actual firearm discharge!

All practice should be accomplished with a NON-FIRING pistol.

Home training involves the practice of presentation (drawing), target acquisition, defensive movement and of course, at all time, safe firearms handling. When using a SIRT pistol, you can also practice trigger press (squeeze), release, accuracy, magazine changes and more. Another advantage of the SIRT pistol is being able to compress more quality practice into a shorter time period.

It is also important, at every reasonable opportunity, to also incorporate shooting range live fire practice to confirm and enhance your dry fire training. You'll find, the more you practice dry-fire exercises, the more proficient you'll be on the live-fire range.

Finally, remember this training is for the basics. Every gun owner is strongly encouraged to acquire periodic additional training from a qualified professional.

Mike Hughes[1], CEO of *NextLevel Training* and a top rated and nationally recognized firearms instructor, has kindly dedicated his time and expertise in developing this brief training introduction.

Although this training curriculum was originally developed for the SIRT pistol, much of this presentation can be modified to accommodate any type of safe dry-fire training pistol.

---

1 Mike Hughes is the President of *Firearms Training Equipment Company* and *NextLevel Training Facility* in Ferndale, WA.

Mike is also creator of the "SIRT" (Shot Indicating Resetting Trigger) non-firing training pistol that is used in his firearms training syllabus, as well as other instructor curriculums throughout the country.

Throughout college Mike was an avid football player, which instilled his believe in "teamwork, preparation, execution". Graduating in both engineering and law, he practiced law for ten years before starting is own business in 2009.

Since then Mike participates in United States Practical Shooting Association (USPSA) matches and has recently earned a seventh-place title at the Nationals.

Mike also placed Second (in a national field of 16 superb shooters) in season three of television's revered History Channel "Top Shot" competition.

Mike and his wife Angie, reside in Maple Falls, WA.

Appendix M — Training Check-List

This check-list can be used either as a "stand-alone" reference for live-fire or dry-fire exercises or in conjunction with the training programs included in this book. It is not necessary to use every check point in this list, but the list is valuable as both a training reminder and importantly, as a record to previous training points.

Abbreviations: **2+1** – Two shots to center mass, one shot to the head; **LF** – Live Fire; **CCW** – Concealed Carry Weapon; **Call** – Specify which target (color, shape, number);

Firearm Fundamentals *Training Checklist*

_____ _____
Name Date

_____ _____ _____ _____
Address Appt Day Date Time

_____ _____ _____
City ZIP Phone Home

_____ _____
Email Phone Work

_____ _____
Second Participate Third Participate

_____ _____
Fourth Participate Fifth Participate

_____ _____
Sixth Participate Seventh Participate

_____ _____
Eighth Participate Ninth Participate

_____ _____
Tenth Participate Eleventh Participate

Type of Training: ❑ Basic ❑ Intermediate ❑ Advanced ❑ CCW
❑ Live Fire Range ❑ Home ❑ Business ❑ Cleaning ❑ Other

_____
Training Notes

Training Items: ❑ Book + ❑ NSSF Brochures ❑ LF Pistol ❑ SIRT
❑ Mags ❑ Belt ❑ Holster ❑ Mag Pouch ❑ Targets ❑ Ammo
❑ Eyes ❑ Ears ❑ Timer ❑ Laptop ❑ Flashlight ❑ Other

_____

_____
Item Notes

Appendix N — Concealed Carry Training Example

Disclaimer: *This format follows the guidelines outlined by the Utah Department of Public Safety, Bureau of Criminal Identification for a Minimum Training Curriculum for Concealed Firearm Course. It is offered only as reference and should not be construed, in any fashion, as either any form of legal advice or by itself, as a training qualification.*

Introduction

To properly teach the course's minimum training standard, a minimum of four hours of "*in person*" training is recommended.

I. General Familiarity
   A. The safe loading, unloading, storage and carrying
   B. Current laws defining lawful self-defense
      1. Use of force by private citizens
      2. Use of deadly force
      3. Transportation and concealment

II. Handgun Safety Rules
   A. The primary causes of firearm related accidents:
      1. Ignorance
      2. Carelessness
   B. Elements of firearm safety:
      1. Positive Attitude
      2. Knowledge
      3. Skill
   C. Four basic gun safety rules:
      1. Treat all firearms as if they are loaded
      2. Always keep your finger off the trigger until your sights are on target and you have made the decision to fire
      3. Never point a firearm at anything you are not willing to destroy
      4. Be sure of your target, your target's environment and any other safety hazards
   D. Other safety rules:
      1. Be sure the firearm is safe to operate
      2. Know how to use the firearm safely
      3. Use only the correct ammunition for your firearm
      4. Wear eye and ear protection as appropriate
      5. Clearing a firearm and safe hand transfer to another
      6. Never use alcohol or drugs when carrying a firearm
      7. Store all firearms so they're inaccessible to unauthorized persons, i.e. children, restricted persons, etc.
      8. Never handle a handgun in an emotional state such as anger or depression
      9. The permit is for a concealed firearm. The firearm should not be displayed unless you intend to use it.
      10. Keep the firearm unloaded until ready to use

Appendix O — State Laws, General

Disclaimer:
This information is current as of the date of publication and is subject to change without notice. All information is offered as reference only and should not be construed, in any way, as any form of legal advice. Always seek the current actual statues and defer to professional legal guidance.

For additional information, see:
http://concealedcarrylaw.net
www.handgunlaw.us/

www.usacarry.com

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General Information

The following are State Government contacts for acquiring information on that State's concealed carry laws, regulations and restriction. A general reference for that State's reciprocity practices are noted as well.

Be advised, laws can change without notice, and there may be numerous important , but obscure exceptions that may exist. ALWAYS check with proper authorities for the correct and complete compliance to all laws for any State you are planning to visit, *or travel through*, while exercising your concealed carry privileges.

Notations

A) North Dakota issues both Class 1 and Class 2 licenses, however the listings in this reference only include recognition of Class 1.
B) * The State only recognizes permit holders who are residents of the state where the permit was issued.
C) ** The State will not recognize out-of-state permits held by their own residents.

Alabama

Attorney General of Alabama
P.O. Box 300152
Montgomery, AL 36130
(334) 242-7300
www.ago.state.al.us

In Alabama, a person may apply for a concealed handgun permit to the Sheriff of the county in which they reside.

Reciprocity **: Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Louisiana, Michigan, Mississippi, Missouri, New Hampshire, North Carolina, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, Utah, Wyoming
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Appendix P — State Reciprocity

Disclaimer*: This information is current as of the date of publication and is subject to change without notice. All information is offered as reference only and should not be construed, in it self, as any form of legal advice.*

The following are State Government contacts to help determine each State's reciprocity laws as it related to concealed carry. Individuals are strongly encouraged to contact each State office for the States you are planing to visit, *or travel through*, while practicing concealed carry privileges.

Alabama
Keith Miller, Chief Deputy Attorney General
Office of the Attorney General of Alabama
11 S. Union Street Montgomery, AL 36130

Alaska
Sandra Fuller
Department of Public Safety Records & Identification Bureau
5700 East Tudor Rd.
Anchorage, AK 99507
Helena, MT 59620-1401

Arizona
Michael J. Kline, Sr., Concealed Weapon Coordinator
Arizona Department of Public Safety
P.O. Box 6488
Phoenix, AZ 85005

Arkansas
Major Kathy Sparks, Commander, Administrative Services Division
Arkansas State Police
1 State Police Plaza Drive
Little Rock, AR 72209-4822

California
Kamala D. Harris, Attorney General
California Office of Attorney General
1300 I Street, Suite 1740
Sacramento, CA 95814

Colorado
Susan Kitchen, Agent in Charge
Colorado Department of Public Safety
690 Kipling St., Ste. 3000
Denver, CO 80215-5825

Appendix Q — References

Below are listed are a number of relevant web sites, though certainly not all that are available. Any omission is not intended as a pejorative rating, but merely a lack of space.

A wealth of information can be found on the internet. Whether you are searching for a manufacturer, State statutes or general information, you can find the latest information on-line.

Hyperlinks — Obviously no one can link directly to a paper page, but *we've done the next best thing!* We've added this Appendix to our web page **www.FirearmFundamentals.net/More** and you can download these references as a PDF with live links. When you click on any reference in the PDF it will take you right to the destination link (providing you're active on the internet).

NOTE: All sites listed were tested and verified as of May 2013, but may change over time.

(Internet addresses are typically preceded by **http://** but it is assumed and need not be entered as part of the address.)

General Information

You can order additional copies this book at our web site:

FirearmFundamentals — **www.FirearmFundamentals.net**

Google: "Googling" any term can result in hundreds of associated links: Google — **google.com**

National Rifle Association of America
Politics aside, The National Rifle Association (NRA) is considered the quintessential resource for valid firearms information. They also are a source for qualified training.

11250 Waples Mill Road
Fairfax, VA 22030
(800) 672-3888

NRA — **home.nra.org**

Wikipedia: An excellent option if you are searching for specific, detailed, unbiased information.
Wikipedia — **en.wikipedia.org/wiki/Main_Page**

YouTube: You can find a plethora of videos, all the way from shooting watermelons to cleaning procedures.

Appendix R — *Bonus Offers*

Save Money
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Use our select vendors discount codes or visit our web site: **www.FirearmFundamentals.net** to cash in on special offers and lots of free stuff!

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http://nextleveltraining.com/product_list
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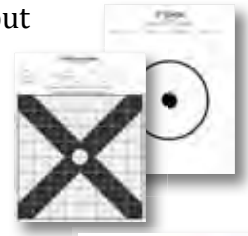

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Symbols

A

B

Quick Reference Guide

Algor Mortis: Body Temperature Reduction at Death
Average: 2° C (3.6°F) first hour, 1° C (1.8°F) per hour until ambient

Ammunition, NATO
9x19mm: (9mm Parabellum or Luger) used in the Beretta M9 pistol
5.56x45mm: (.223 caliber) used in the AR15, M16, M4 and other rifles.
7.62x51mm: (.308 caliber) used in the M14, AR10 and sniping rifles
12.7x99mm: (.50 caliber BMG) used in the M2 heavy machine gun and the Barrett series (M82-M107) long range sniping rifles

Ammunition, Related Military
5.45x39mm: Cartridge used in the Russian style AK74 rifles
7.62x39mm: Cartridge used in the Russian style AK47, SKS rifles

Bullet Weight
Measured in Grains: 1 oz = 437.5 gr., ½ oz = 219 gr., ¼ oz = 109 gr.

Cartridge Size
American: CALIBER — Hundredths of an inch (some exceptions apply)
European: MM — Bullet Diameter **X** Case Length (i.e. 9x19mm)

Four Rules of Gun Safety
- Treat every gun *as if it were loaded*!
- Point the *muzzle in a safe direction*!
- Know your target and *beyond*!
- Keep your *finger off the trigger* until the target is in your sights!

Ft.-Lbs.
Foot-Pounds. A bullet's remaining kinetic energy.

Klick
A reference to a distance of one kilometer (.62 miles, generally ⅗ mile)

Mile
5,280 feet, 1,760 yards, 1,609 meters, 1.61 kilometers, 1½ mi = 2,640 yds

Meter
39.37 inch (as reference, think 3-3-3, meaning 3 feet, 3 inches, ⅜ inch)

Millimeter
.0394 inch, 1 inch = 25.4mm, .22" = 5.58mm, .354" = 9mm, .45" = 11.4mm

Shotgun Gauges & Size (From largest to smallest)
10 gauge, 12 gauge, 16 gauge, 20 gauge, 28 gauge, .410 bore

Shot Pellets, Bird (increasing size)
12, 9, 8 ½, 8, 7 ½, 7, 6, 5, 4, 3, 2, 1, B, BB, BBB, TT, F, FF