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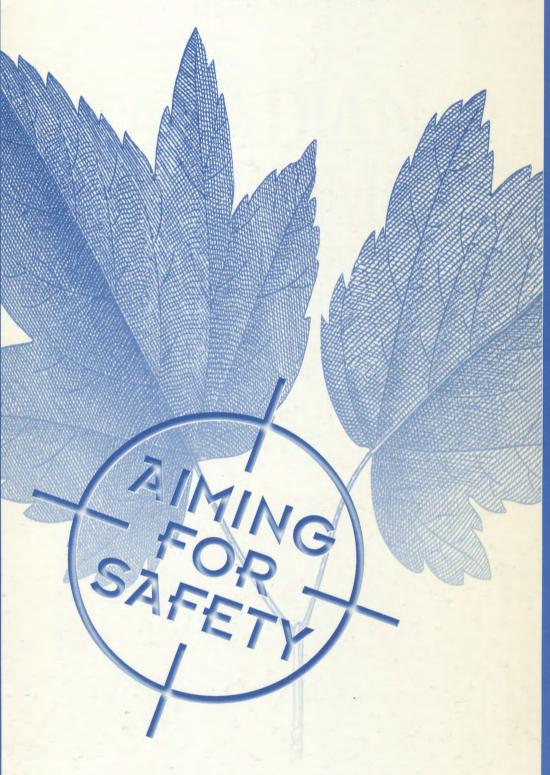
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Canadian Firearms Safety

DEPARTMENT OF JUSTICE

Course

Student's Handbook













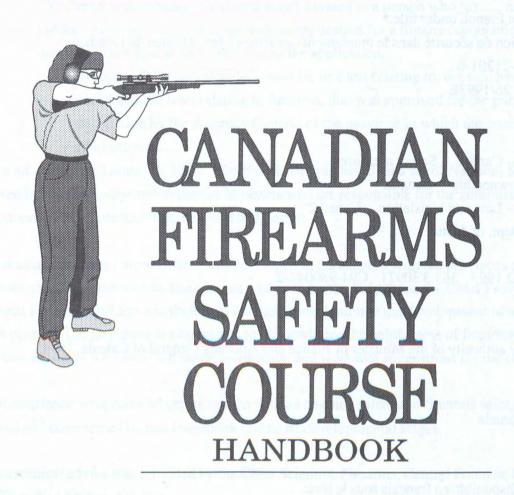












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Acknowledgements

This Handbook was developed to meet the mandatory requirements set out in Subsection 106(2)(c)(i) of the <u>Criminal Code</u> of Canada. This Subsection reads, inter alia, as follows:

"No firearms acquisition certificate may be issued to a person who (c)....., fails to produce evidence in conjunction with an application for a firearms acquisition certificate that the person has, at any time prior to the application,

(i) successfully completed a course in, or a test relating to, the safe handling and use of and the laws relating to firearms, that was approved for the purposes of this section by the Attorney General of the province in which the course or test is administered."

It came into effect on January 1, 1994. The Handbook was based on a set of National Standards approved by the provincial and territorial Ministers who are responsible for the administration and enforcement of the Canadian firearms control program.

The Canadian Firearms Safety Course was developed in partnership with the provinces and territories. Therefore, the Department of Justice Canada wishes to particularly thank the Chief Provincial and Territorial Firearms Officers and their staff for their contribution to the development of all materials for this course. The Department also wishes to acknowledge the helpfulness of firearms instructors from across Canada who provided many worthwhile and workable suggestions for the course material.

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Firearms Control Task Group Department of Justice Canada

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CANADIAN FIREARMS SAFETY COURSE

HANDBOOK

INTRODUCTION

·				

Introduction to the Course

By 1992, Canadians possessed approximately six million *firearms**. Every year, more than 180,000 new Firearms Acquisition Certificates are issued. With such a large number of firearms in existence and thousands of new individuals with various firearms interests entering the system, the Canadian public, through Parliament, set mandatory standards of firearms safety and competence in handling firearms. Therefore, this Canadian Firearms Safety Course was developed by the Department of Justice Canada in partnership with the provinces and territories.

This course will assist you to get a Firearms Acquisition Certificate (FAC). Successful graduates of this course will be certified to be familiar with the laws and regulations pertaining to the possession, transfer, transport, storage and safe use of firearms. In addition, graduates will have passed a written and a performance test proving their ability to handle firearms safely.

Most safety courses concentrate on the prevention of accidents due to careless use or unintentional discharge of firearms. However, far more deaths and serious injuries occur each year due to the <u>intentional</u> misuse of firearms in suicides and homicides. Many of these deaths and injuries result from acts of sudden impulse that might not have happened if the firearms and ammunition were more safely stored. Therefore, this course stresses **both** the secure storage of firearms and ammunition, and their safe handling and use.

Course Objectives

Students completing this course will have an enhanced awareness of the social responsibilities of owners and users of firearms, and will know how to:

Comply with firearms laws;
Store firearms and ammunition safely;
Transport firearms safely;
Handle firearms and ammunition safely; and
Use firearms and ammunition safely.

* See Glossary for definition of technical terms used in this handbook.

The Canadian Firearms Safety Course consists of classroom instruction and learning the material in this handbook. This learning must then be demonstrated by passing written and practical tests of the knowledge and competence you gained in the course. The instructor may add extra materials and exercises to the course, such as experience at a firing range, to enhance the material already covered in this handbook.

In this course, some topics are intentionally discussed and explored several times. This approach helps learning and retention. Leaving out any of the assignments, exercises or tests given by your course instructor, will reduce your learning, just as skimping on exercises will weaken a physical training program.

The Canadian Firearms Safety Course emphasizes safe storage, display, handling, transportation and use of firearms. However, safe handling must also be based on a better understanding and knowledge of firearms, ammunition, and the laws and regulations related to them. Your safety and that of the people around you depend on more than just safe *physical* actions. Safety also very much relies on your attitude about responsible handling and use of firearms. Therefore, you will want to pay close attention to the sessions on legal, ethical and social responsibilities.

Your Course Handbook

This book, plus the classroom lessons and the practical exercises given by your course instructor, will help you to learn how to safely handle firearms, and to know the laws relating to them. It contains:

- the "Vital Four" rules of safe firearms handling;
- a brief history of firearms;
- information on firearms and ammunition parts and how they work;
- instructions on how to pick up, handle and carry firearms safely;
- information on how to handle, store, transport and display firearms safely;
- examples of firearms accidents and misuse of firearms;

- descriptions of how to unload, load and fire firearms correctly;
- descriptions of the correct firing positions;
- instructions on field and range safety;
- a summary of ethics and laws affecting firearms owners and users, and
- a glossary of firearms terms.

For more detailed information or training in special areas such as muzzle loading firearms, handguns, reloading of ammunition, specialized target shooting and hunting, we recommend that you contact specialized shooting or hunting clubs or associations.

Contact your provincial and local authorities for detailed regulations or for information on provincial or local firearms laws and regulations. Regulations for manufacturers of firearms and ammunition, dealers in firearms, and museum operators are different. Consult the legislation or a firearms officer in your local police service.

₄ January, 1994

The "Vital Four" Rules of Firearms Safety

Your instructor will refer to many different safety rules and guidelines. Most importantly, the instructor will return again and again to four basic "life and death" rules. These are:



1. Regard every firearm as loaded

Always assume that a firearm is loaded until you have personally checked it.

Regard any firearm as a potential hazard even though you see a person handling it safely.



2. Control the muzzle direction at all times.

Continually identify the safest muzzle direction and keep your gun pointed that way.

Only point a firearm at a practice or game target that you intend to shoot.

The muzzle of a firearm should not be pointed towards yourself or any other person.



3. Keep your finger off the trigger except when firing.

Resist the temptation to put your finger on the trigger when you pick up or hold a firearm.

Accidental discharges will far more likely occur if your finger is on the trigger.



Open the action and check that there is no ammunition in the firearm.

Every time you handle a firearm, for any reason, check to see that both chamber and magazine are empty.

Pass or accept only open and unloaded firearms. This is an important habit to develop.

Obtaining a Firearms Acquisition Certificate

To acquire a firearm in any manner anywhere in Canada, you must first get a Firearms Acquisition Certificate (FAC). In addition, persons employed in businesses or museums where duties include handling non-restricted firearms, restricted firearms or prohibited weapons, must also have a valid FAC.

Requirements

To apply for an FAC:

- you must be 18 years of age or older;
- you must provide proof that you successfully completed a course or test in the safe handling and use of firearms and related laws and regulations;
- you must fill in an application form, and give the names of two references who have known you for three years and can confirm the information you supply in the application;
- those qualified by the regulations to act as references include:
 - an employer or fellow employee;
 - a minister of religion authorized to perform marriages;
 - an aboriginal chief, councillor or tribal elder;
 - a full-time bank manager or any signing officer of a bank, trust company, credit union or caisse populaire;
 - a judge or justice;
 - a police officer, police constable, sheriff or deputy sheriff, game warden or wildlife biologist employed by the government;
 - a member of the Senate, House of Commons or legislature of a province or territory;

- a mayor, reeve, warden or municipal clerk, a member of a council or board of trustees of a municipality or a member of a board of an educational authority;
- a doctor or other health care practitioner as defined by the <u>Canada</u> Health Act;
- a social worker or alcohol/drug addiction counsellor;
- a full-time commissioned officer of the Canadian Forces;
- a person in a licensed or accredited occupation or profession such as a lawyer, engineer, electrician, plumber, teacher, and
- the applicant's spouse, if the spouse is 18 years of age or older.
- you must include a current photograph that is clear enough to identify you because this photograph will be reproduced on your FAC; and
- you must not be prohibited by order of the court or by condition of probation from having a firearm in your possession.

In special circumstances, a firearms officer can exempt you from the safety course or test if the officer is satisfied that you have the necessary knowledge and competence. This applies only if you have owned a firearm since 1979 and can show knowledge of the basic principles of safe handling of firearms, the basic operation of common sporting firearms, and basic knowledge of the laws and regulations that apply to firearms. In other words, you must exhibit knowledge equal to someone who has taken the firearms safety course.

Cost

There is a fee for an FAC. It is non-refundable and payable upon application. If an applicant is renewing an FAC before it is expired, only one-half of the fee will be charged. No fee will be charged to an FAC applicant who must use a firearm to hunt or trap in order to sustain him or herself or family.

Processing the Application

You can get an FAC application from your local police service. An FAC application will normally be handled by the police agency having jurisdiction over the area in the province or territory where you live. For complete information on processing, contact your local police. You do not have to submit your application in person, but the local firearms officer will need you to appear in person to verify identification.

You must wait at least 28 days before your FAC is issued. However, if you already have a valid FAC and are applying for a new one, your new FAC may be issued without waiting the full 28 days.

Past tragedies have shown that certain individuals are a greater risk to themselves or others. Therefore the questions that will be asked on the form are intended to uncover a number of indicators to screen out these individuals and avoid future tragedies in the home or elsewhere.

During the processing period, the firearms officer may interview your neighbours, family members, social workers or others to assist in the thorough screening of FAC applicants. If a firearms officer refuses to issue an FAC, the officer must notify you in writing of the refusal and of the reasons for the refusal, and provide you with documentation about the appeal process. You then have a maximum of 30 days to request the firearms officer to refer the opinion to a provincial court judge.

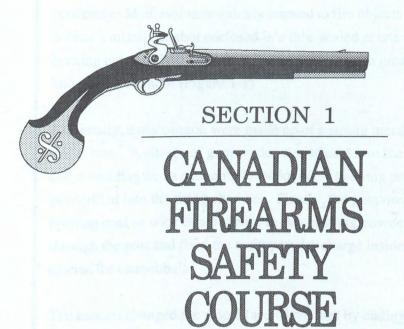
Having a Firearms Acquisition Certificate allows you to purchase or acquire firearms anywhere in Canada for a five year period.

If you currently own a firearm, you do not need an FAC to sell or dispose of it. However, anyone buying or otherwise receiving a firearm must have a valid FAC.

A Minors' Permit may be issued for persons from the age of 12 to the day before their 18th birthday with the consent of a parent or guardian. The permit allows a minor to possess and use a non-restricted firearm under conditions of supervision. Some of these conditions include: using a firearm for target practice, hunting game or receiving instruction in the use of a firearm.

Minors

Exceptions to these conditions can be made for minors who need the use of firearms a sustain themselves or their families. In these special cases, there is no minimum age a no supervisory conditions. There is no fee for a Minors' Permit.				



INTRODUCTION TO FIREARMS

HANDBOOK

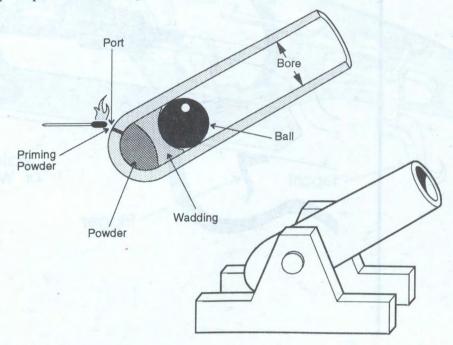
The Evolution of Firearms

There is some argument over who first invented what came to be known as gunpowder. Generally the Chinese are said to have made the first explosive powder for use in fireworks and rockets. At about the same time, in the western world, the 13th century English priest and alchemist named Roger Bacon probably discovered gunpowder independently. Medieval man quickly learned to fire objects by igniting this explosive powder behind a missile or shot enclosed in a tube sealed at one end. The rapid expansion of the burning powder fired the missile from the tube with great force. This tube came to be known as a cannon. (Figure 1-1)

Essentially, early cannon were made up of a strong metal tube with a long smooth cylindrical bore. A charge of gunpowder was loaded into the bore of the cannon followed by some wadding and a cannonball. Next, some priming powder was placed in a hole or port drilled into the firing chamber. Finally, the gunpowder was fired by touching a burning coal or wick or a hot wire to this priming powder. The flame travelled down through the port and fired the main powder charge inside the cannon, and violently ejected the cannonball.

The cannon changed the whole face of warfare by ending the dominance of the stone castle that had previously enabled the nobility to protect their villages and successfully defy the power of the kings.



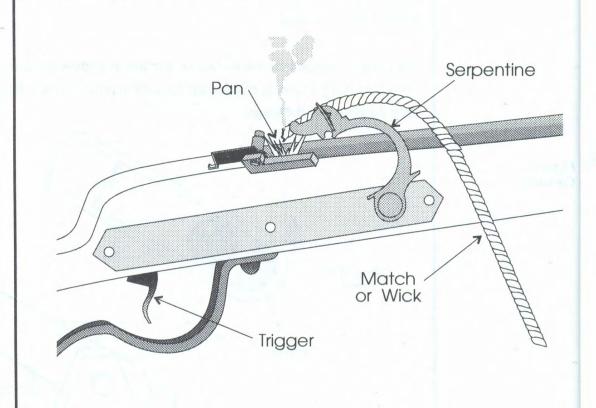


Matchlocks

During the following centuries, firearms that could be carried and fired by one person evolved from these first large and clumsy cannon. One of the earliest personal firearms was the matchlock created in the early 1400's (Figure 1-2). It was a smoothbore firearm with a slow-burning match or wick placed over an open pan containing the priming powder. The match was held by a pivoting S-shaped part known as a serpentine. When one end of the serpentine was moved, the other end dipped the burning match into the priming powder, which in turn fired the main charge of gunpowder through the port. It enabled a shooter to aim and fire while holding the gun with both hands.

These early firearms had a smooth bore and could shoot either single or multiple projectiles depending on the type of target. Their presence in large number on the battlefield marked the beginning of the end of the armoured knight. The portability of these firearms made them practical for hunting as well as for their original military purposes.

Figure 1 - 2 Matchlock



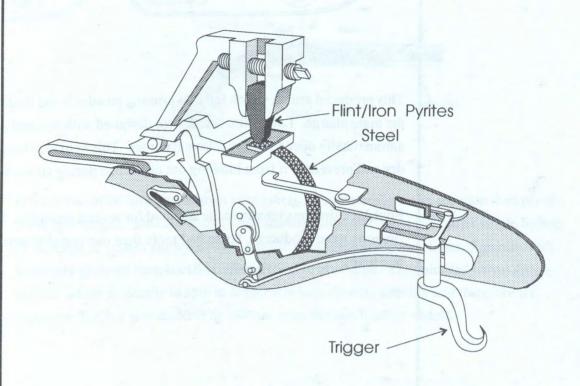
SECTION 1 INTRODUCTION TO FIREARMS

Wheel-Locks

The matchlock had many disadvantages; for example, rain or high wind could put out the match. Also, having lighted matches close to gunpowder led to many accidental firings and explosions. Two improved firing systems known as the wheel-lock and the flint-lock were developed in the 17th century (Figures 1-3 & 1-4). Instead of a burning match, these used sparks to light the priming powder when the trigger was pulled.

The wheel-lock worked much like a modern cigarette lighter. A tooth-edged wheel was turned by a strong spring against a piece of flint or iron pyrites causing a burst of sparks. Between shots, the spring was wound up with a key like a clock. This made it safer and more ready for instant use than the matchlock. However, rewinding was slow, springs frequently failed, and the mechanism was complex and expensive to make.

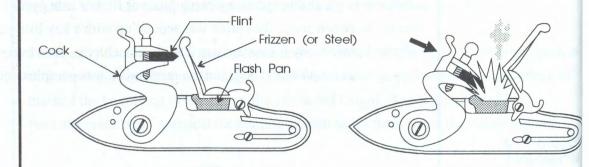
Figure 1 - 3 Wheel-lock



Flint-Locks

A simpler type of ignition mechanism known as the flint-lock (Figure 1-4) soon became more popular. It weighed less and was simpler and cheaper to make. The flint-lock produced its spark by striking a flint against steel. The flint was clamped to the cock and was positioned opposite the steel. The cock was pulled back against spring pressure, or "cocked", before firing. When the trigger was pulled, the cock was released and a spring snapped the hammer down to strike the steel with the flint.

Figure 1 - 4 Flint-lock



This produced sparks which fell into priming powder in the flashpan below, which fired the main charge. Later, flint-locks were designed with covered priming pans that were automatically opened by the falling hammer. This helped to keep the priming powder dry and prevented it from blowing out of the pan during strong winds.

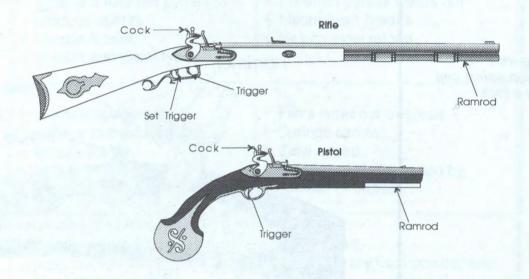
Flint-lock firearms remained the standard for several centuries. Many kinds of flint-lock firearms were produced. Some had more than one barrel to permit more than one shot at a time.

SECTION 1 INTRODUCTION TO FIREARMS

Handguns

During the 15th century, firearms with much shorter barrels, that could be held and fired with one hand were developed. (Figure 1-5) These came to be known as pistols, probably after the town of Pistoia in Italy where very early handguns were manufactured. Early pistols were largely used by cavalry soldiers who did not need long range accuracy. Also, pistols were far easier to handle from the back of a horse and several could be carried to allow multiple shots. As new firing mechanisms were developed for long guns, handguns also adopted them.

Figure 1 - 5
Antique pistol
and rifle



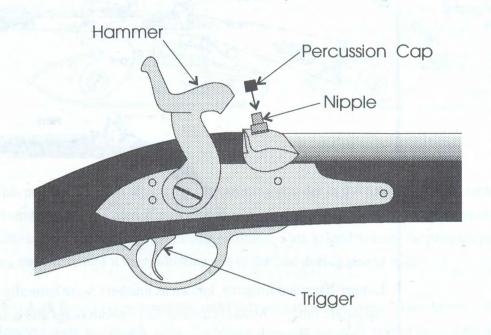
Rifles

Longer-barrelled firearms, known as muskets, were naturally more accurate than pistols for longer ranges. Muskets usually had smooth bores and could fire either single bullets or a charge of pellets known as shot, similar to modern shotguns. Later, firearms with internally grooved barrels called rifles were also produced. The spiralled barrel grooving caused the projectile to spin in flight; this improved its stability and therefore its accuracy. Rifling also came to be used in some muzzle loading pistols.

Percussion Caps

After several centuries of flint-lock use, the percussion cap was developed in the early 1800's. It consisted of a small metal case or cap containing a material that would explode when struck a hard blow. When loading the firearm, a percussion cap was placed on a nipple located over the priming port. When struck by the hammer, the cap exploded and fired the main powder charge in the chamber of the firearm. Percussion caps were far more dependable than the older flint-lock firearms, particularly in stormy weather. This new ignition system led to the development of the revolving pistol and eventually to the development of the metallic cartridge. (Figure 1-6)

Figure 1 - 6
Percussion cap
on a lock



SECTION 1 INTRODUCTION TO FIREARMS

TYPES	MAIN FEATURES	LIMITATIONS	
MATCHLOCK (14th Century)	 Used lighted wick to fire priming powder Muzzle-loaded 	 Wick easily extinguished by rain Wick burns out Dangerous around gunpowder Clumsy Slow reload Spring required hand winding Flint/iron pyrites wears out Mechanism breaks Heavy, slow reload 	
WHEEL-LOCK (17th Century)	 Spring driven wheel rubbed against a flint/iron pyrites to produce sparks Muzzle-loaded Musket and pistol types 		
FLINT-LOCK (17th Century)	 Flint snapped against a surface to produce spark Muzzle-loaded Rifling introduced Paper cartridge introduced 	 Flints wear out or break Springs can fail Slow reload Number of shots limited by number of barrels 	
PERCUSSION CAP (19th Century)	 Small explosive metal cap replaced flint More certain of firing revolving action repeater introduced 	Slow reload Cap separate from powder and bullet	
METAL CARTRIDGE (19th Century)	 Primer, powder and bullet all in 1 safe container Simple, reliable, safe Breech loading became easy Smokeless powder introduced 	 Requires special equipment to reload cartridge Source of litter Easy for unqualified persons to load into a firearm 	
REPEATERS (19th Century)	 Holds and can fire multiple shots after 1 loading Semi-automatics and full automatics introduced 	 More complex mechanisms More danger of an unused round remaining in firearm 	

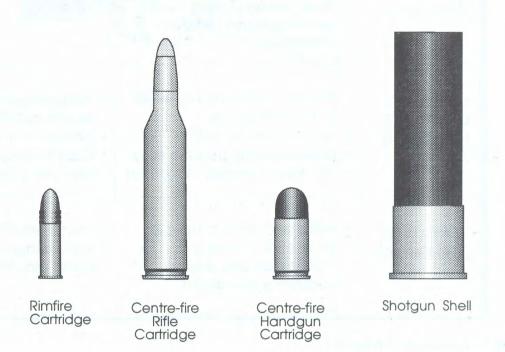
Chart 1 - Evolution of firearms

Metallic Cartridges

Nearly all early firearms were loaded through the muzzle, and are thus called "muzzle-loaders". They were slow to reload, and the number of shots that could be fired at one time was limited to the number of barrels. Early attempts at developing a breech loading firearm (i.e., one loaded from the back end) were failures, largely because the expanding gases from the burning powder charge leaked back through the crudely made breech parts.

Then in the mid-1800's, various types of cartridges were developed which made breech loading practical, eventually ending up with metal-cased cartridges similar in design to those still used today. (Figure 1-7) These metal cartridges contained the primer, the main powder charge and the bullet or shot all in one package. The internal primer was fired when struck by a spring-driven firing pin after the trigger was pulled. This then fired the main powder charge. The burning charge expanded the metal cartridge case slightly during firing; this sealed the breech to prevent flashback. In addition, the one-piece cartridge could easily and rapidly be loaded into the breech and was largely weatherproof. Similarly, cartridges known as "shells" were developed for use in shotguns. These too contain primer, powder, and one or more projectiles all in one container. (Figure 1-7) However, the cartridge case may be made from a combination of metal, paper, and/or plastic.

Figure 1 - 7 Examples of modern ammunition



TYPE	COMPONENTS	PURPOSE	USES	
CARTRIDGE		USED IN RIFLES AND HANDGUNS		
RIMFIRE OR CENTRE-FIRE Sizes: Calibre e.g22 or .30 or 7mm	CASE	Contains components	Target shooting	
	PRIMER	Fires main powder charge when struck by firing pin	Hunting Military Police	
	POWDER	Burns and expands to propel bullet		
	BULLET	Strikes target	Collecting	
SHELL		USED IN SHOTGUNS		
Sizes: Gauge e.g 12 or 20 gauge or .410 cal. 2 3/4", 3", 31/2" approximate case length after firing	CASE	Contains components	Hunting	
	PRIMER	Fires main powder charge when struck by firing pin	Clay target shooting Collecting	
	e length POWDER Burns and expands to propel		Military	
	WAD	Seals barrel behind shot during firing		
	SHOT or SLUG	Spreads out to strike target Strikes target		

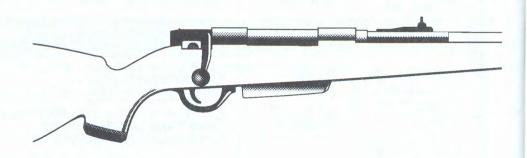
Chart 2 - Types and sizes of modern ammunition

Repeating Firearms

Because metallic cartridges were so easy to load, repeating firearms became practical. (Figure 1-8) Variations include:

- a) revolving pistols;
- b) repeating rifles and shotguns with magazines containing several extra cartridges;
- c) semi-automatic firearms which use part of the force of the expanding gases of the powder to reload another cartridge after each trigger pull;
- d) fully-automatics, such as machine guns, which fire continuously on one sustained pull of the trigger.

Figure 1 - 8 A modern repeating firearm



Firearms in Canada

Since they were first brought to Canada in the 16th century, firearms have played an important part in the lives of its inhabitants. Because firearms greatly extended the rank and killing power for hunting, the resident native peoples were eager to trade large qual tities of furs for them. "Trade guns" thus became an important factor in the early fur trade that helped open up Canada to the world.

Both the native peoples and the early settlers used firearms. For several more centuries hunting in the surrounding wilderness provided a major source of food. In the early yes of a settlement or during poor crop years, hunting was often critical to survival.

Later, as hunting for food grew less necessary for survival, many shooters turned to target shooting. Nowadays, numerous shooting clubs and associations exist. Their members shoot various types of shotguns, rifles or handguns at a wide range of targets from clay targets to paper targets. In addition, there are associations and clubs for fire arms collectors.

SECTION 1 INTRODUCTION TO FIREARMS

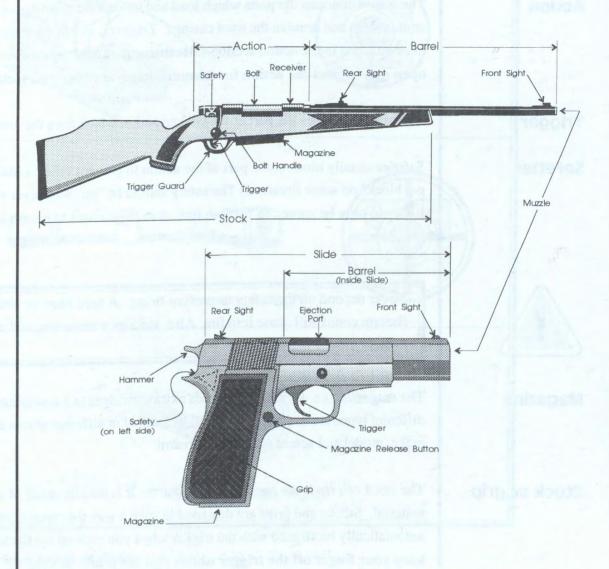
The first rule of firearm safety is to assume that every firearm is loaded. Be critical of the way firearms are being handled around you.

Major Firearm Parts

To use a firearm safely, you must know its parts and understand how they work. Below is a brief introduction to the major parts of a firearm. Their functions are also explained in more detail in Section 4.

Generally, every firearm has three major sections: the barrel, the action and the stock (also called the grip on a handgun, Figure 1-9).

Figure 1 - 9 Long gun and handgun



Barrel

The *barrel* is the metal tube through which the bullet or shot travels when the gun is fired. Typically, the name of the cartridge for each firearm is stamped on the barrel (see Data Stamp). The front end of the barrel is called the muzzle. Always make sure the muzzle of any firearm is pointed in a safe direction at all times.

Sights

Sights are usually mounted to the top of the barrel to assist with accurate aiming. There are three main types: open sights, peep or aperture sights and telescopic sights. Rifles and handguns may have any of these three types, but most shotguns usually have only a bead mounted on the front of the barrel to act as a front sight. (Figure 1-10)

Action

The action contains the parts which load and unload the cartridge or shell, fire the ammunition and remove the used casings. Triggers, safeties and magazines are found in or attached to the action section. Because you should regard every firearm as loaded open and inspect the action for ammunition every time you pick up any firearm.

Trigger

The trigger releases the part of the cocked action which fires the ammunition.

Safeties

Safeties usually block some part of the action to prevent firing. (Also known as a "trigger block" on some firearms.) The safety should be "on" whenever a firearm is loaded. It should only be moved to "off" to fire, or in some cases to permit opening of the action.



Never depend on the safety to prevent firing. A hard blow or shock to a loaded firearm could still cause it to fire. Also, safeties wear down, and may not operate fully.

Magazine

The *magazine* is a device which holds extra cartridges in a repeating firearm. Several different types are used and these will be located in different places depending on the make, model and action type of the firearm.

Stock or grip

The *stock* or *grip* is the handle of the firearm. It is usually made of wood or synthetic material. Stocks and grips are designed in such a way that your trigger finger will automatically be aligned with the trigger when you pick up the firearm. Be sure to keep your finger off the trigger unless you are ready to fire.

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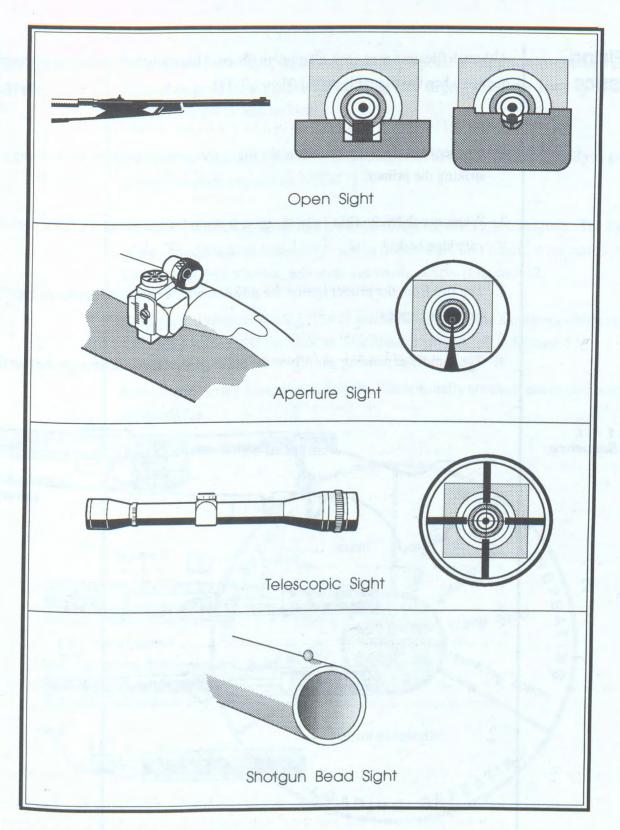


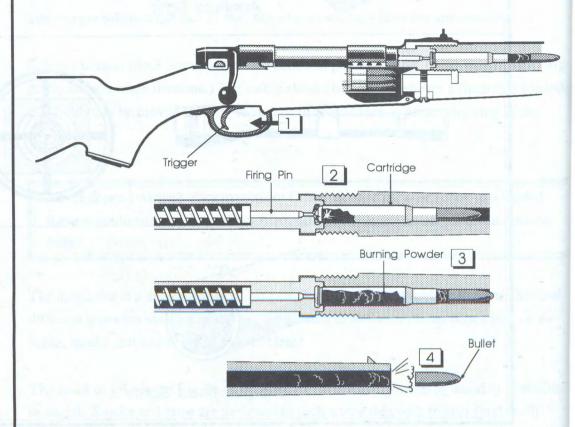
Figure 1 - 10 - Various types of sights

The Firing Sequence

Although firearms may vary, all modern firearms basically follow the same firing sequence when the trigger is pulled (Figure 1-11).

- 1. A squeeze of the trigger releases the firing mechanism resulting in the firing pin striking the primer.
- 2. When struck by the firing pin, the primer explodes and projects a flame into the cartridge body.
- 3. The fire from the primer ignites the powder, which burns and produces rapidly expanding gases.
- 4. The rapidly expanding gas drives the bullet or shot forward through the barrel.

Figure 1 - 11 Firing Sequence



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Types of Firearms

Firearms vary in design, depending on their purpose. Some are intended for various types of target shooting, some for shooting clay targets, others for hunting birds, small game or big game, and so forth.

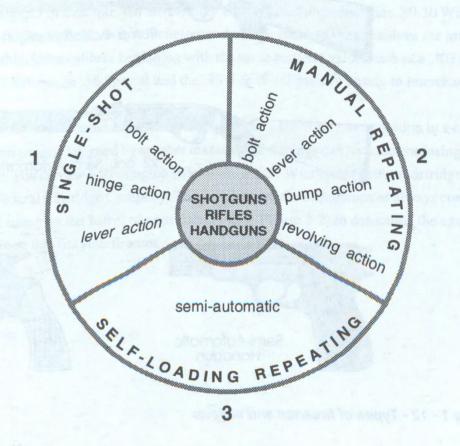
Firearms are also described by action categories as single shot, manually repeating, and self-loading repeating. (Chart 3)

The three common **types of firearms** are shotguns, rifles and handguns. The basic **types of actions** most commonly used in firearms are bolt action, lever action, break or hinge action, pump action, and semi-automatic action. (Figure 1-12)

In addition, a sixth, revolving type of action is used by some handguns which are therefore called "revolvers" (actions are described in more detail in Section 4).

Some firearms may have several barrels. These usually are shotguns or combination shotgun/rifles.

Chart 3 - Action Categories



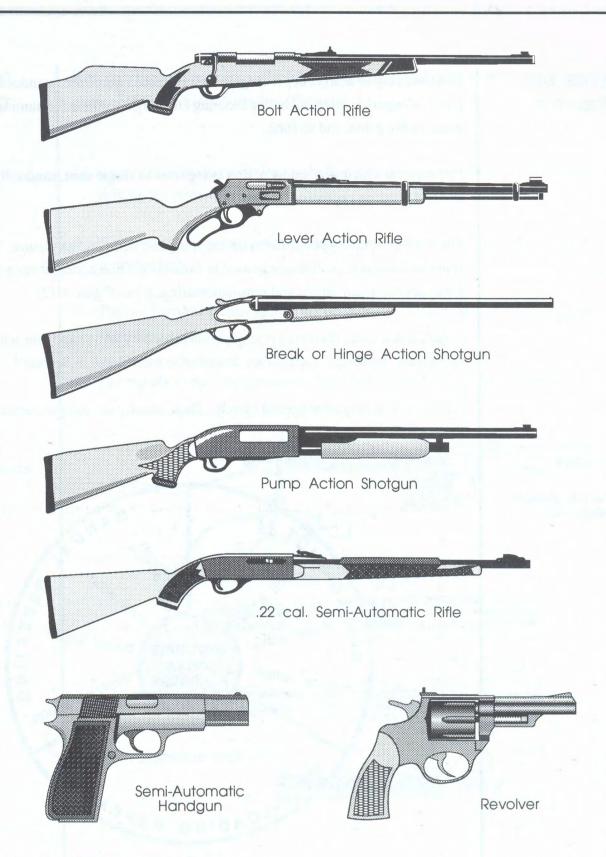


Figure 1 - 12 - Types of firearms and actions

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SECTION 1 INTRODUCTION TO FIREARMS

Rifles and Pistols -Rifling

Rifles and Pistols Calibre (See also Section 3, Cartridge Names)

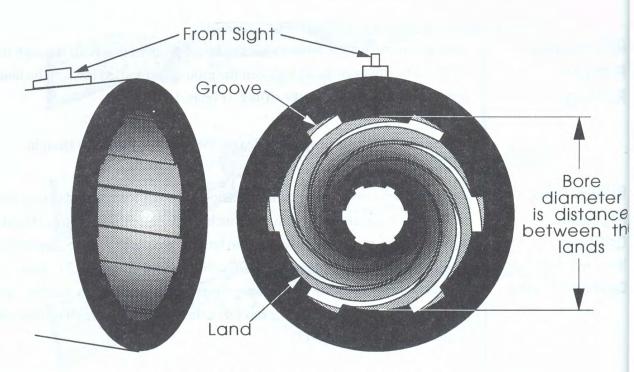
Rifle and pistol barrels have a series of spiral grooves that twist through the bore of the barrel. The ridges of metal between the grooves are called lands. The lands and grooves together make up the rifling. (Figure 1-13)

Rifling makes the bullet spin as it leaves the barrel so it will fly straight.

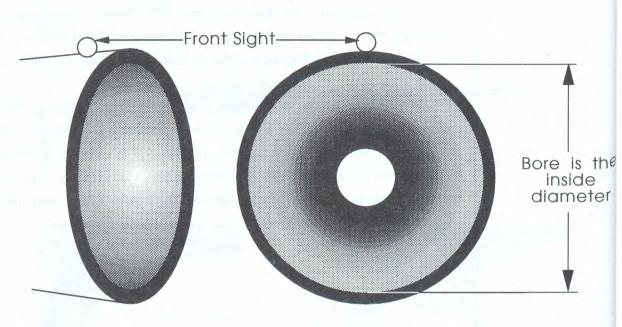
Rifled firearms are sized by calibre. Historically, calibre referred to the diameter of the bore stated in either hundredths of an inch (Imperial) or millimetres (Metric). The distance could be measured either land to land or groove to groove, depending on the specific cartridge. For example, a .270 calibre barrel measures .27 inches or 27/100ths of an inch from land to land. For firearms measured in millimetres, calibre was typically the groove to groove distance. For example, a 9mm para measures 9 millimetres from groove to groove. (See Figure 1-13)

Currently, the modern definition of "calibre" also includes a description of the cartridge to distinguish between cartridges having the same bore diameter but different cartridge case designs. For example, the .30 calibre family of cartridges includes .30-30 Winchester, .30-06 Springfield, .308 Winchester and others. None of these calibres are interchangeable. Even calibres beginning with the same numeric value, such as a .303 British and .303 Savage, or .38 Special and the .38 S & W are usually unsafe to interchange.

Because any manufacturer may choose to produce a firearm or ammunition in a cartridge calibre originally designed by another manufacturer, things can become confusing. For example, you can use a Remington rifle to fire a .308 Winchester calibre cartridge made by the Federal Cartridge Company. This emphasizes the importance of always consulting the data stamp on the barrel of your firearm (See Figure 3-2) to determine the exact ammunition that fits your firearm.



Looking Down a Rifle Barrel



Looking Down a Shotgun Barrel

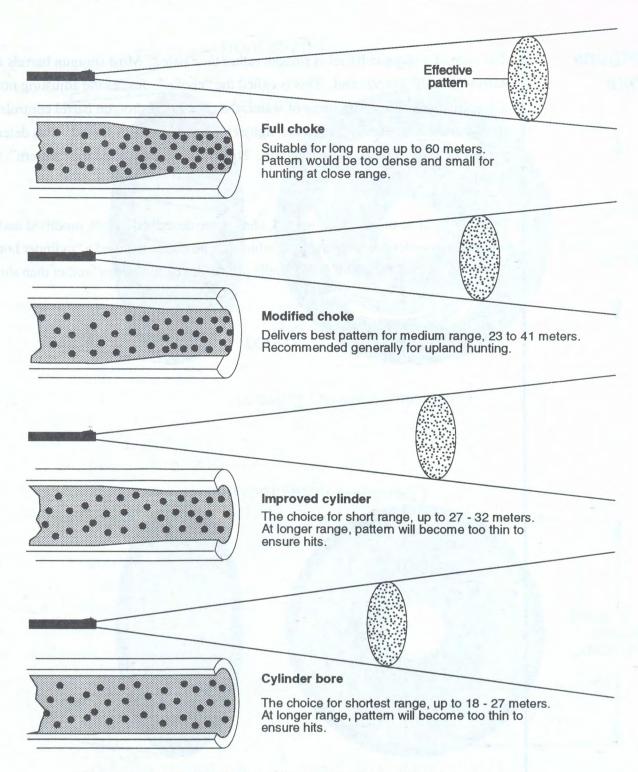
Figure 1 - 13 - Rifle and shotgun barrel differences

Shotguns -Choke

The bore of a shotgun barrel is smooth rather than rifled. Most shotgun barrels are narrowed at the muzzle end. This is called the "choke". Just as the adjusting nozzle on a garden hose controls the spray of water, the choke of a shotgun barrel controls the spread of the shot after it is fired i.e. 'tighter' choke equals less spread. This determines the most effective range of the shotgun. The shot spread is called the "pattern". (Figure 1-14)

From the tightest to the widest spread, chokes are described as full, modified and improved cylinder. A shotgun barrel which has no choke is called a "cylinder bore". These are generally used for firing single projectiles called "slugs" rather than shot.

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Distances shown are effective pattern range. Shot will travel much further (See Chart 10 - Section 3).

Figure 1 - 14 - Cross-section view of various chokes and illustration of shotgun patterns (for typical 12 Gauge Shotgun)

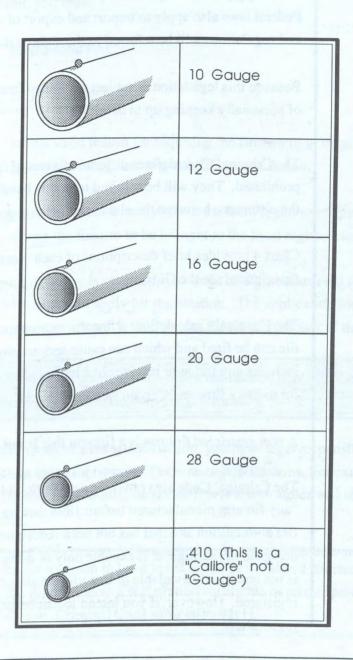
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SECTION 1 INTRODUCTION TO FIREARMS

Shotguns -Gauge

Shotgun barrels are sized by gauge instead of calibre. Gauge is an older system of measurement and is calculated by the number of lead balls (each having the same diameter as the bore) that weigh one pound. In other words, if it took twelve balls with the same diameter as the bore to make one pound, a shotgun with a bore of the same diameter of one of these 12 balls would be called a 12 gauge shotgun. One exception to this rule is the .410 cal. shotgun, which is measured in calibre because this size was developed at a later date in history. (Figure 1-15)

Figure 1 - 15 Gauge sizes (not to scale)



Some Legal Considerations

Legal Responsibilities

The purpose of most laws that govern firearms is to protect human life and property, protect and conserve wildlife, or set certain standards of conduct. As an owner or use of a firearm, you have a legal responsibility to know and understand these laws, regulations and restrictions.

The <u>Criminal Code</u>, which applies throughout Canada, contains laws and offences which apply to the acquisition, possession, use, storage, and transportation of firearms. Federal laws also apply to import and export of firearms and explosives. Relevant law and regulations will be referred to throughout this course wherever they apply.

Because this legislation is subject to change from time to time, you must make a point of personally keeping up to date.

Classes of Firearms

The <u>Criminal Code</u> defines different classes of firearms: non-restricted, restricted and prohibited. They will be referred to in this handbook, and you will need to understand the difference between the classes before you acquire a firearm.

Chart 4 provides brief descriptions of each class. For a more detailed and complete description, see the Glossary.

The <u>Criminal Code</u> defines a *firearm* as a weapon that has a barrel from which a projectile can be fired and which can cause serious physical injury or death to a person, and includes any frame or receiver of a barrelled weapon and anything that can be adapted for use as a firearm. Certain weapons are excluded from this definition.

A non-restricted firearm is a firearm that is **not** restricted or prohibited.

The <u>Criminal Code</u> also provides a definition of antique firearm. An antique firearm "any firearm manufactured before 1898 that was not designed to use rim-fire or centre fire ammunition and that has not been redesigned to use such ammunition, or, if so designed or redesigned, is capable only of using rim-fire or centre-fire ammunition that is not commonly available in Canada". Antique rifles and shotguns do not need to be registered. However, if you intend to discharge an antique handgun, it is subject to registration.

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SECTION 1 INTRODUCTION TO FIREARMS



Acquiring and Registering Restricted Firearms

It is a <u>Criminal Code</u> offence for a person, who is not authorized by law, to have in his or her possession a prohibited weapon. Maximum sentence: ten years. <u>Criminal Code</u> subsection 90(1). A five year sentence may apply to anyone present in a vehicle in which he or she knows there is a prohibited weapon unlawfully. <u>Criminal Code subsection 90(2)</u>.

If you wish to obtain a restricted firearm, you must get it registered. To register a restricted firearm, you must:

- hold a valid FAC;
- be 18 years or older;
- have a valid reason for requiring the firearm (e.g. target practice at an approved club, genuine gun collector, etc.); and,
- get a "Permit to Convey" from the local registrar of firearms, which allows the firearm to be brought to the local registrar for identification.

Once the Permit to Convey is obtained, you must bring the restricted firearm to the local registrar of firearms to apply for registration. The application for a restricted weapons registration certificate is then sent to the Commissioner of the RCMP.

Procedures for applying to register a restricted firearm may differ across Canada. Contact your local firearms registrar for information.

As the registered owner of a restricted firearm, you have legal responsibilities that differ in some ways from those for owners of non-restricted firearms. For example, the owner of a restricted firearm **must** notify the police if it is lost or stolen and report to them any change of address.



It is an offence for a person to have in his or her possession a restricted firearm for which he or she does not have a registration certificate or proper permit. Maximum sentence: five years. Criminal Code subsection 91(1).

NON-RESTRICTED FIREARMS

Ordinary rifles and shotguns which are not otherwise restricted or prohibited. See below.

Chart 4 - Classes of firearms, non-restricted

RESTRICTED FIREARMS

- 1. Handguns.
- 2. Handguns manufactured before 1898 that use rim-fire or centre-fire ammunition that is commonly available in Canada.
- 3. Semi-automatic centre-fire firearms with a barrel less than 470mm.
- 4. Certain military and paramilitary firearms prohibited by Order in Council, but registered to grandfathered owners (July 27, 1992).
- 5. Any firearms designed or adapted to be fired when reduced to a length of less than 660mm by folding, telescoping, or otherwise.
- 6. Fully-automatic firearms registered as part of a genuine gun collection on January 1, 1978.
- 7. Converted fully-automatic firearms registered as part of a genuine gun collection (October 1, 1992).
- 8. Other firearms not reasonable for use for hunting or sporting purposes declared restricted by Order in Council.

Chart 4 - Classes of firearms, restricted

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PROHIBITED WEAPONS AND DEVICES

- 1. Fully-automatic firearms not registered to grandfathered collectors.
- 2. Converted fully-automatic firearms not registered to grandfathered collectors.
- 3. Sawed-off or otherwise altered rifles and shotguns with barrels less than 457mm, or overall length less than 660mm.
- 4. Silencers.
- 5. Switchblade knives.
- 6. Large capacity cartridge magazines;
 - · over 10 shots for handguns and
 - over 5 shots for centre-fire semi-automatic rifles and shotguns and certain listed assault pistols.
- 7. Weapons, parts, components or ammunition declared prohibited by Order in Council, such as:
 - · Certain military and paramilitary firearms;
 - Body-armour piercing handgun cartridges, incendiary and explosive projectiles and shotgun "flechette" cartridges;
 - "Bull pup" stocks for rifles or carbines;
 - · Devices that enhance the rate of fire;
 - · Stun guns, taser public defenders;
 - SSS-1 Stinger and variants;
 - · Brass knuckles;
 - · Mace, tear gas, and -
 - · Certain martial arts devices.

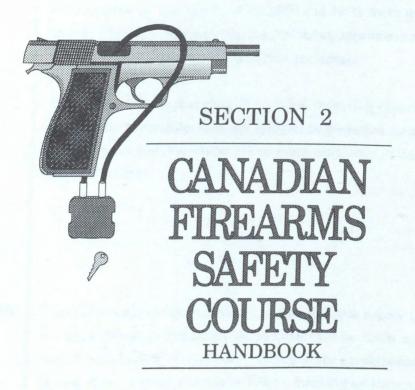
Chart 4 - Classes of firearms, prohibited



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FIREARMS SAFETY

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Firearms-Related Deaths and Injuries

Much of the information in this course applies to the prevention of accidents with firearms. However, firearms users should realize that firearms safety also includes the prevention of intentional misuse of firearms.

For example, on average between 1980 and 1990, there were about 1300 deaths per year in Canada involving firearms. Of these, approximately 80% were suicides, 15% were homicides and 5% resulted from accidents.

These figures show that most of the harm involving firearms is deliberate. If firearms are readily accessible, they are subject to potential misuse. That is why the new firearms laws and this course put so much emphasis on the secure storage of firearms and ammunition.

Intentional Misuse of Firearms

Secure Storage

This is probably the most effective single action to reduce intentional misuse of firearms. Firearms and ammunition should not be easily accessible by unauthorized users. For example, do not leave the key or the combination to the storage area or case laying about or give them out to others. Locking up firearms and ammunition is important because many suicides and homicides are acts of sudden impulse. Making access to firearms and ammunition difficult could delay a depressed or violently angry person long enough for the impulse to lessen. Most other weapons or means of violence that might then be substituted cannot do drastic harm as easily as a firearm.

In addition, the secure storage of firearms and ammunition will also deter their easy theft by criminals. Remember, you are responsible for your firearms 24 hours a day. Therefore, it is wise on both moral and legal grounds to have your firearms stored securely and safely when you are no longer physically in control of them.

Watch for signs of risk

Sometimes it is possible to detect the symptoms of possible suicide or the approach of violent situations before they happen. Remember, these can happen in our own households or those of our friends and neighbours. If you are aware of such developing situations, and there are firearms present, it is sometimes wiser to completely remove

them - even if they are adequately stored. If you cannot do this yourself, make the police aware of the situation. Just as you would not hesitate to intervene to prevent a relative or friend from drinking and driving, do not hesitate to prevent the misuse of firearms by others.

Several examples of intentional misuse of firearms are given below.

Examples of Suicides

- a) A youth of 18 was involved in an traffic accident while using his father's truck. After returning home and informing his father, he was scolded. The father then left to examine the damaged truck at the repair shop. The youth loaded a bullet of his own into the father's rifle which was kept unsecured in the home and shot himself fatally. The youth had previously attempted suicide.
- A youth broke up with his girlfriend. He went home where a rifle and ammunition were kept in a closet. He shot himself in the face.

 Surgery saved his life but he lost an eye. He states that if no firearm had been readily available, he would not have attempted suicide. Ten years later he has not re-attempted suicide.

CAUSES: Firearm not locked or stored securely.

Examples of Homicides

- a) During a family argument, a drunken husband threatened his wife with a 12 gauge shotgun normally stored under the bed. It discharged, killing her.
- b) A man was ejected from a bar after a heated argument with several other patrons. He ran to his nearby home, snatched his father's rifle from a gun rack plus some ammunition from a shelf below and returned to the bar. He fired into the crowded room from the doorway killing one person and wounding two others.

CAUSE: Easy access to firearms and ammunition.

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Accidental Misuse of Firearms

Common Firearm Accidents

Most firearm accidents happen because of one or more of the following reasons:

- unauthorized access or improper storage;
- lack of control of muzzle direction;
- careless or ignorant use;
- accidental firing;
- users who are not competent;
- aiming or firing at the wrong target;
- using the wrong ammunition.

Insecure storage of firearms also leads to many tragedies due to use by unqualified or unauthorized persons.

Examples of Accidents

- a) A child was playing with a rifle that had been left loaded and within easy reach. A parent grabbed the barrel of the rifle and pulled it away from the child, but was wounded when the rifle fired.
- b) Two young children playing in their home found a loaded handgun in a bedside table. One was killed when the firearm fired.

CAUSES:

- (1) insecure storage of a firearm,
- (2) unsafe muzzle direction,

Most accidents involve a muzzle being pointed at the holder of the firearm or someone else. They occur when people have their finger on the trigger before they are absolutely ready to shoot, or quite often when other objects accidentally release the trigger.

Examples of Accidents

- a) A boy was carrying his rifle cocked, loaded and ready to fire with the trigger portion under his armpit. The rifle fired when he moved his arm, wounding another hunter.
- b) A hunter and his brother were crawling through dense bush with a loaded and cocked rifle. The rifle caught on a bush and accidentally fired, wounding the brother.
- A shooter at a range had his finger on the trigger of his pistol while it was pointing at a 45 degree angle in front of him at his firing point.
 He prematurely applied pressure to the trigger causing it to accidentally discharge into the table. Bullet fragments caused a leg wound.

CAUSES:

- (1) unsafe muzzle direction or control,
- (2) carrying a loaded and cocked firearm, and
- (3) finger on the trigger before the sights are aligned of the target.

Many firearm accidents occur while getting in or out of a car or a boat with a loaded firearm.

Examples of Accidents

- a) One case involved a man who propped his loaded firearm against a car. It fell and fired, and the bullet ricocheted from the roof of the car to hit the victim sitting inside.
- b) A woman was killed when she pulled a shotgun towards herself by the barrel as she was getting out of a pick-up truck. The trigger caught on the seat and the shotgun fired.

CAUSES:

- (1) unsafe muzzle direction,
- (2) loading a firearm before being ready to fire, and
- (3) careless handling of firearm around vehicles.

Many accidents occur when loading and unloading firearms.

Examples of Accidents

- a) In one case, a man was loading his rifle with the muzzle pointing to his left, where another person was standing. The other person was wounded when the rifle accidentally fired.
- b) Another young man wounded himself when he rushed to load a car tridge into his rifle while his finger was on the trigger.
- c) An accident occurred when a boy began to pump the action of his rifle to see if it was loaded. The rifle fired and the bullet struck a young girl.

CAUSES: (1) unsafe muzzle direction, and

(2) unsafe loading/unloading procedure.

Climbing or jumping obstacles while carrying a loaded firearm causes many shooting injuries.

Examples of Accidents

- a) A young woman crossed over a fence while holding a loaded firearm. She wounded herself when her rifle accidentally fired as it caught on the fence.
- b) A man tossed his firearm over a small ditch before crossing. The firearm twisted around as it hit the ground and fired, seriously wounding the hunter.

CAUSES: (1) unsafe muzzle direction, and

(2) crossing obstacles with a loaded firearm.



Anyone who, without lawful excuse, points a firearm at another person, whether the firearm is loaded or unloaded is guilty of an indictable offence and could be sent to prison for up to five years. <u>Criminal Code</u> Section 86(1).

Accidents can occur when the wrong ammunition is used.

Examples of Accidents

- a) A hunter was carrying a mix of different shotgun shells in his pocket. He accidentally loaded a 20 gauge shell into his 12 gauge shotgun. When this did not fire, he then inserted a 12 gauge shell behind the first shell. When this shell was fired, the barrel burst and injured the shooter's face.
- b) A box of ammunition purchased at a store contained a similar but incorrect cartridge that had probably been switched accidentally by a previous customer. When fired, the barrel of the firearm burst and injured the shooter's hands.

CAUSES:

- (1) using wrong ammunition, and
- (2) not checking if a firearm barrel is clear before loading.



Every person who stores, displays, handles or transports any firearm in a manner contrary to regulations is guilty of an indictable offence and liable to imprisonment for a term not exceeding two years. <u>Criminal Code</u> Section 86(3).

The Vital Four

As you will have noticed from the previous examples, almost all firearms accidents could be prevented if certain basic safety rules are followed. The most crucial of these are called the "Vital Four" rules. These are shown and explained in Chart 5.

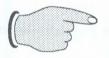
The "Vital Four" Rules of Firearms Safety



1. Regard every firearm as loaded

Always assume that a firearm is loaded until you have personally checked it.

Regard any firearm as a potential hazard even though you see a person handling it safely.



2. Control the muzzle direction at all times.

Continually identify the safest muzzle direction and keep your gun pointed that way.

Only point a firearm at a practice or game target that you intend to shoot.

The muzzle of a firearm should not be pointed towards yourself or any other person.



3. Keep your finger off the trigger except when firing.

Resist the temptation to put your finger on the trigger when you pick up or hold a firearm.

Accidental discharges will far more likely occur if your finger is on the trigger.



4. Open the action and check that there is no ammunition in the firearm.

Every time you handle a firearm, for any reason, check to see that both chamber and magazine are empty.

Pass or accept only open, unloaded firearms. This is an important habit to develop.

Chart 5 - The Vital Four Rules of Firearms Safety

The 3 Keys to Firearms Safety

As demonstrated by the examples shown earlier in this Section, firearms are potentially dangerous devices. They demand respect at all times. Never relax your guard when around them. If you always follow the "Vital Four" rules of firearms safety, a great majority of firearms accidents will not happen.

However, in addition to the Vital Four, there are actually about twenty other important firearms safety precautions that will help prevent or reduce **both intentional and unintentional misuse** of firearms. These are grouped here as "The 3 Keys to Firearms" Safety" to help you learn and remember them more easily.

01

KEY #1 - KEEP FIREARMS AND AMMUNITION SEPARATE AND SECURE WHEN NOT IN USE

Remember, firearms under your care and control are your responsibility twenty four hours a day. Therefore:

- use locking devices (trigger or cable locks, for example) on firearms whenever they are stored or transported. In many cases it is a legal requirement for you to have your firearms unloaded and properly locked. Be aware of the legislation regarding what firearms need to be locked and when.
- keep guns and ammunition out of sight during transport and storage. This will reduce the chances of theft and also prevent use by unqualified or unauthorized persons.
- transport and store firearms unloaded and in locked containers or spaces. Lock the firearm, lock the case and lock the transport or storage area whenever possible. Once again, this will reduce the chances of theft and also prevent use by unqualified persons.
- store guns unloaded and separate from ammunition. Lock the firearm and the ammunition away separately when storing a firearm. Ammunition and firearms should be kept away from children. This reduces the chance of accidental of tragic use by others.



KEY #2 - LOAD A FIREARM ONLY FOR ACTUAL USE

- Load only when you have reached the shooting area and are ready to shoot Completely unload before you leave the shooting area.
- When passing a firearm, always make sure it is unloaded before it leaves you hands. Unload all guns when not in immediate use. Whenever possible, leave the actions open so that others can see they are safe.

- Never run, climb a tree or fence, or jump a ditch with a loaded firearm. Never toss or drop a firearm across a ditch or fence. Don't lean firearms against a vehicle, tree or wall: they could fall and accidentally fire.
- It is safer to transport only unloaded firearms in or on a vehicle or boat. Many accidents occur as firearms are being put in or removed, or because the motion of the vehicle or boat causes stumbling or dropping of the firearm.
- Always unload a firearm before transport or storage. This prevents accidental
 discharge if bumped during transport and also reduces the chances of unexpected firing by an unqualified user.
- Always wait 60 seconds before removing a misfire. While waiting, keep the muzzle pointed in a safe direction.

KEY #3 - BE SURE BEFORE YOU SHOOT

- Always check that the barrel is clear before loading. This can most safely be done by passing a rod from the muzzle end of the barrel to the breech or by looking through the bore from the breech end of the firearm, if possible.
- Always check that you are using the right ammunition. Use only the ammunition for which the firearm was designed. Carry only the type of ammunition you intend to shoot.
- Never rely on the firearm's safety. Safeties wear down and may not work properly. Also, a loaded gun may sometimes fire even with the safety on, if struck sharply or dropped.
- Always 'qualify' (i.e. confirm) your target before you fire. This means:
 - carefully identify your target and make sure that it is exactly what you want to shoot; and,
 - don't shoot when in doubt, and never fire when your target is only a movement, a colour, a sound or a shape.
 - · check that you have a clear field of fire;
 - check that the area behind your target is safe before shooting;
- Never aim at anything you don't intend to shoot. Use binoculars when you are hunting. Scope sights should never be used instead of binoculars. Identify and qualify your target first with your eyes only or with binoculars before aiming the firearm.
- Always be aware of where your bullet or shot may end up and take responsibility for it. A bullet or shot may bounce or travel far beyond the target, so be sure to:
 - never shoot if your bullet may hit a hard surface or water. This could cause the bullet or fragments of the bullet to ricochet in an unsafe direction;
 - never shoot at a target on the skyline, near a building or on a hill; and
 - shoot only when you are sure that nobody is ahead of you.



3 KEYS TO FIREARMS SAFETY

- LOCK TRIGGER OR ACTION BEFORE FIREARM TRANSPORT OR STORAGE
- KEEP FIREARMS & AMMUNITION OUT OF SIGHT DURING TRANSPORT & STORAGE
- TRANSPORT & STORE FIREARMS IN LOCKED CONTAINERS OR SPACES
- STORE FIREARM & AMMUNITION SEPARATELY & SECURELY



KEEP FIREARMS AND
AMMUNITION SEPARATE
AND SECURE WHEN
NOT IN USE

- . LOAD ONLY AT THE SHOOTING AREA
- . UNLOAD BEFORE -
 - (a) LEAVING THE SHOOTING AREA
 - (b) PASSING A FIREARM TO SOMEONE ELSE
 - (c) CLIMBING OR CROSSING AN OBSTACLE
 - (d) ENTERING A VEHICLE OR BUILDING
 - (e) TRANSPORT OR STORAGE



ONLY FOR
ACTUAL USE

- CHECK THE BARREL IS CLEAR BEFORE LOADING
- USE THE CORRECT AMMUNITION
- . USE THE SAFETY, BUT DON'T RELY ON IT
- NEVER AIM A FIREARM AT ANYTHING YOU DON'T INTEND TO SHOOT
- CHECK AROUND AND BEYOND YOUR TARGET BEFORE SHOOTING
- A BULLET CAN BOUNCE OFF WATER OR HARD SURFACES, CONSIDER WHERE ELSE IT MIGHT GO



BE SURE BEFORE
YOU SHOOT

Chart 6 - 3 Keys to firearms safety

HAZARD	PRECAUTIONS
ACCESS BY UNQUALIFIED OR UNAUTHORIZED USERS	 Neutralize action before storage or transport (or use trigger or cable lock) Store firearms safely - locked cabinet or container, or of view Store ammunition separately - locked container, out of view Supervise unqualified users
ACCIDENTAL FIRING	 Muzzle always under control Unload firearm when not in immediate use Open action - when handling, climbing obstacles or during transport Keep finger off trigger except when firing Safety ON No horseplay
WRONG AMMUNITION	 Carry only correct ammunition Check ammunition against firearm data stamp Use proper ammunition for target & conditions If re-loading, follow correct procedures
RICOCHETS	 Do not fire at flat or hard surfaces or water Check area near or behind target before firing
WRONG TARGET	 Identify target before firing Do not fire over hills or upwards Know what is behind target Make sure backstop is adequate

Chart 7 - Firearm hazards and precautions

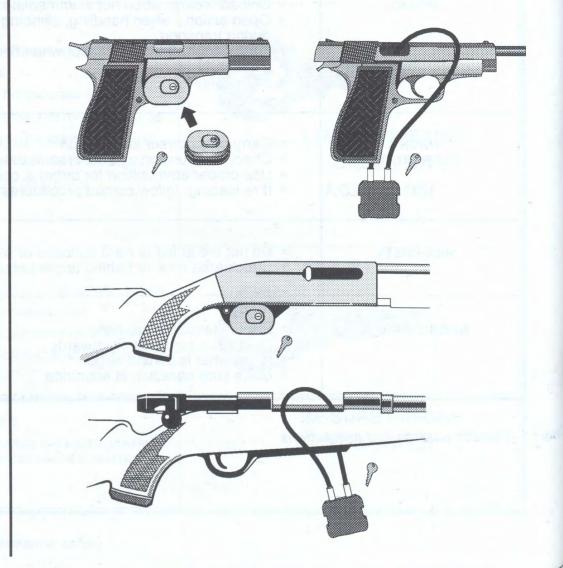
Firearm Locking Devices

Firearm locking devices prevent a firearm from being fired. (Figure 2-1) In some cases, these locking devices are required by law for transportation, display and storage of non-restricted and restricted firearms (see Section 9 for complete requirements).

Generally, locking devices are highly recommended for any type of firearm during storage or transportation.

Several devices are available for this purpose. Mechanical and cable-type trigger locks, and chain or cable locks inserted through the action to block operation are popular methods. Check with a firearms dealer for other types of secure locking devices.

Figure 2 - 1 Various firearm locking devices, shown installed on the firearm



Personal Safety Protection

Shooting, like all other active sports, has the potential to cause personal injury. For example, shooters travelling through thick brush risk eye damage from projecting branches. Target shooters risk eye damage from ejected cartridge cases, cartridge case fragments and other debris ejected during firing. Continued exposure to shooting noise can result in hearing loss. The risk of slips and falls while travelling in the field is always present. Therefore, the careful shooter takes steps to minimize the potential for damage from these hazards.

Slips and Falls

The danger of slipping and falling can best be avoided by common sense. Pick out the safest trail, do not depend on surrounding branches to support your weight, do not cross streams on wet logs or wobbly stones and so forth. Wearing deep-tread high boots will reduce the possibility of slips and also protect your ankles and legs from cuts from sharp rocks. If a fall should occur, remember your first action should be to control the muzzle of your firearm to prevent any injury from an accidental discharge. In other words, the damage to yourself from a fall is likely to be less than the possible damage from an accidental shot.

Eye Protection

As mentioned, eyes can be damaged by the entry of foreign objects, but they also can be injured by over exposure to ultraviolet rays from the sun. To avoid both hazards, shooters should wear combined safety/sunglasses made of impact resistant glass or polycarbonate plastic. These will resist scratching and screen out ultraviolet rays. They also will help to protect your eyes from ejected cartridge cases, a firearm malfunction or stray shotgun pellets or bullet fragments.

For shooters, optometrists recommend medium or dark grey lenses that do not affect colour perception.

Hearing Protection

Loud sounds can damage your hearing. Sound is measured in decibels (dB) and ranges from zero for no sound upwards for louder sound. A half hour exposure or less to 130 to 140 dB will usually cause hearing damage. A firearm's sound averages 140 dB at close range. The need for hearing protection is obvious.

Several types of hearing protection are available. On the firing range, shooters should always wear 'earphone' type hearing protectors. These provide the maximum sound protection and can be used for years with minimum maintenance. However, they are

clumsy for field shooting. Ear plugs are more portable for field use. They are available in several types. Disposable ear plugs are made of foam or wax materials and are used only once. Reusable ear plugs made of rubber are also available in several sizes. They require care and cleaning before re-use.

When hunting, consider wearing blaze orange (some provinces require this by law). Beware of cumbersome clothing, such as bulky jackets or wading boots, that can caust you to get tangled or interfere with safe handling of your firearm.



Occasionally, a hot, ejected cartridge case may contact unprotected skin causing the shooter to flinch. This could result in unsafe muzzle direction or even accidental discharge. Button up the neck of your shirt or blouse to prevent the entry of hot casings.





Section 2 - 16 January, 199^A

SECTION 3



CANADIAN FIREARMS SAFETY COURSE

HANDBOOK

AMMUNITION

NOTES:

SECTION 3

CANADIAN FURHARMS SAFEIY COURSE HANDBOOK

MANDALLION

MOTHER MAN

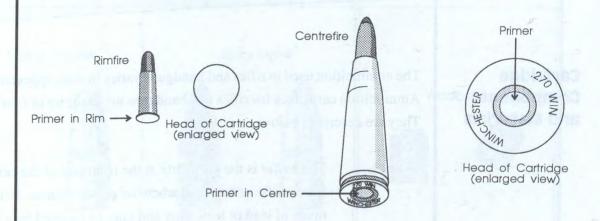
Introduction

Rifle and Handgun Cartridges

Figure 3 - 1
Example of a rimfire and centre-fire cartridge

When shooting or hunting, you should carry only ammunition that suits the firearm you are using and the target you intend to shoot. The following information will help you choose the correct ammunition for your firearm and your purpose. Cartridges for rifles and handguns will be discussed first, then shells for shotguns, followed by black powder. For more detailed information, consult a firearms dealer or a gunsmith.

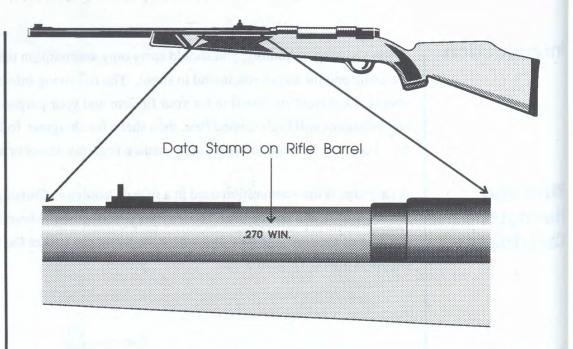
A cartridge is the ammunition used in a rifle or handgun. Cartridges are available in two forms: rimfire and centre-fire. These terms describe both where the primer is located at the base of the cartridge case and where the firing pin strikes the cartridge case when the trigger is pulled. (Figure 3-1)



Manufacturers produce firearms of many calibres. The main point to remember is to always make sure the name of the cartridge matches the information given on the data stamp on the barrel of the firearm (Figure 3-2). Then, choose the right type of ammunition for the job you want done - for example, the right shape or weight of bullet. If in doubt, consult a firearms or ammunition dealer. If there is no data stamp, take the firearm to a gunsmith for measurement and advice on proper ammunition.

Some firearms may not have a data stamp or may have an incorrect stamp. They should be checked by an expert before use.

Figure 3 - 2
Example of a
barrel data stamp



Cartridge Components and Materials

The ammunition used in rifles and handguns varies in size, appearance and materials. Ammunition cartridges for rifles and handguns are made up of four basic components. They are described below.

1. The *bullet* is the projectile at the front end of the cartridge that is shot from a rifle or handgun when the powder burns. Usually, the bullet is made of lead or lead alloy and may be covered by a jacket of a harder metal, such as copper, gilding metal or steel.

Bullets come in a variety of sizes, shapes and weights, depending on the type of target or the area where you will be shooting. (Figure 3-3)

Bullets designed for hunting often have a soft or hollow point. These are designed to expand or flatten upon impact, thus using up most of their energy on the target. Many target bullets have solid points and are commonly referred to as a full metal jacket or ball ammunition. The reduced impact expansion makes them unsuitable for shooting most game. Handgun target bullets are commonly of a design known as a wadcutter or semi-wadcutter. Their sharp edges produce precise holes in paper targets.

SECTION 3 AMMUNITION

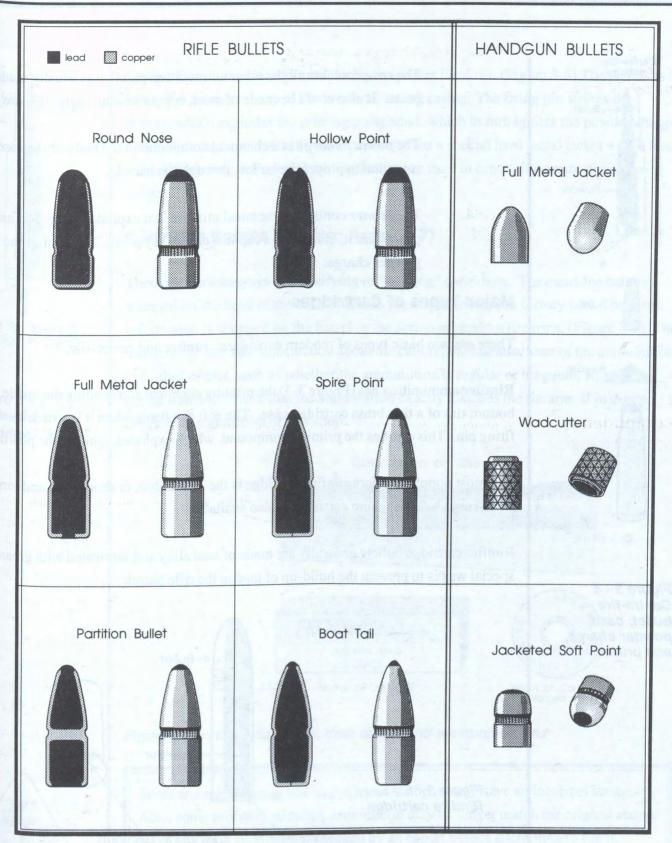


Figure 3 -3 - Jacketed and unjacketed rifle and handgun bullets

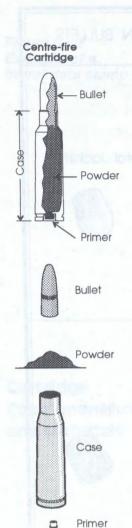


Figure 3 - 4
Centre-fire
bullet, case,
powder charge,
and primer

- 2. The *case* contains all the other ammunition parts. It is usually made of brass. It also could be made of steel, copper or aluminum. (Figure 3-4)
- 3. The *powder charge* is a chemical compound in the body of the case that is ignited to propel the bullet through the barrel.
- 4. The *primer* contains a chemical mixture that explodes when the firing pin strikes it, much like a cap in a child's toy pistol. This ignites the powder charge.

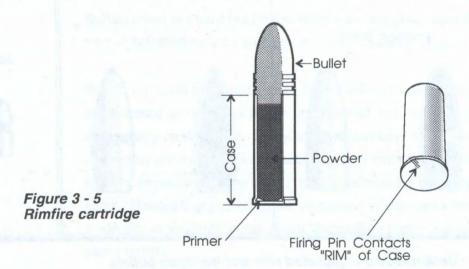
Major Types of Cartridges

There are two basic types of modern cartridges: rimfire and centre-fire.

Rimfire ammunition has (Figure 3-5) the priming chemical surrounding the inside bottom rim of a thin brass cartridge case. The soft rim dents when it is struck by the firing pin. This crushes the priming compound, which explodes, igniting the powder.

The most popular modern rimfire cartridge is the .22 calibre, in short, long and long rifle sizes. A .22 magnum cartridge is also available.

Rimfire cartridge bullets generally are made of lead alloy and lubricated with grease or special waxes to prevent the build-up of lead in the rifle barrel.



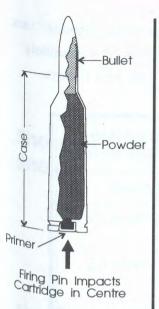


Figure 3 - 6 Centre-fire cartridge

Centre-fire ammunition is used for higher power firearms. (Figure 3-6) The primer is located in a separate cup in the head of a strong casing. The firing pin strikes the primer, which explodes the priming compound, which in turn ignites the powder charge. The bullet may be of lead alloy, but it usually has a special hard metal jacket with a lead core. Expanding and non-expanding bullets are used in centre-fire ammunition cartridges.

Cartridge Names (See also Page 1-17)

There are various ways of identifying or "naming" cartridges. The cartridge name is stamped on the head of the case; it is also found printed on the factory box. The same information is stamped on the barrel or the action of modern firearms. (Figure 3-7). The whole name includes information about the calibre, the manufacturer of the ammunition and other details, such as whether the ammunition is regular or magnum. Read the **whole name** to ensure that the ammunition exactly matches the firearm. If in doubt, check with a gunsmith or gun shop.

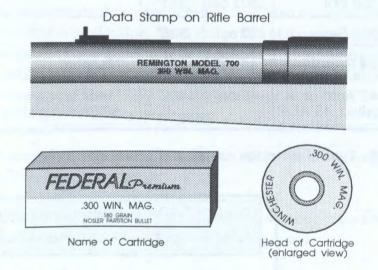


Figure 3 - 7 - Cartridge head, data stamp and ammunition box



Some ammunition may not have a name stamp or may have an incorrect stamp.

Also, some privately reloaded ammunition may no longer match the original stamp.

Have any such ammunition checked by an expert **before** attempting to use it.

The following chart shows some examples. As can be seen in the chart, cartridge "name are often similar and many different "names" may fit the same calibre, so it absolutely essential to read the whole name of a cartridge before selecting it for your firearm.

Name	Bore Bullet Dia. Dia.		Miscellaneous	Original Manufacturer or Major User				
.45-70/Gov	.45 cal	.458"	70 grains black powder	U.S. Government				
.30/30 Win	.30 cal	.308"	30 grains of powder (1st U.S. smokeless cartridge)	Winchester Arms Co.				
7mm Rem Mag	7mm cal	.284"	Magnum - has higher velocity compared to standard cartridges	Remington Arms Co.				
.308 Win	.30 cal	.308"	Also 7.62mm NATO	Winchester Arms Co.				
.30/06 Spr	.30 cal	.308"	adopted by U.S. government in 1906	Springfield Armoury				
.303 Brit	.303 cal	.311"		British army				
.303 Sav	.30 cal	.308"	de la companya della companya della companya de la companya della	Savage Arms Co.				
.44 Rem Mag	.44 cal	.429"	Magnum	Remington Arms Co.				
.45 Auto or called .45 ACP	.45 cal	.452"	Made for semi- automatic pistols	ACP = Automatic Colt Pistol				

Chart 8 - Typical cartridge names and actual diameters

Dry firing a rimfire firearm can damage the firearm. "Dry fire" means to imitate live firing, except without a cartridge in the chamber.



Never use incorrect ammunition in your firearm: for example, .303 Savage ammunition in firearms chambered for .303 British. The smaller Savage ammunition may burst the case. Also, .30-30 calibre ammunition may do the same if mistakenly used in .303 calibre firearms. This dangerous situation can occur with other calibres as well.

Shotgun Shells

Shotgun Shell Components and Materials

To choose the right ammunition for the type of target and firearm, follow the manufacturer's recommendations. For handgun and rifle ammunition, the manufacturer's recommendations are included in the catalogues distributed through sporting goods stores and gun shops.

A round of shotgun ammunition is called a "shell" rather than a cartridge and is measured by gauge rather than by calibre. Shotgun ammunition is centre-fire. The primer is located in a separate cup in the centre bottom of a strong casing or hull with a thick solid base. The firing pin strikes the primer, exploding the priming compound and igniting the powder. The projectile charge can consist of either a number of pellets or a single slug.

Shotgun shell components are very similar to the components of rifle and handgun cartridges, except that there are five components rather than four. (Figure 3-8) A description of typical shotgun ammunition components appears below.

- 1. Shot is the name for the charge of pellets fired from a shotgun. Shot may be either lead or steel pellets. Steel shot pellets of the same size have a shorter range. The size and number of pellets varies depending on the type and the range of target. Smaller pellets usually are used for smaller or closer targets. (Figure 3-9) Sometimes a single large "slug" is fired from a shotgun for hunting larger game.
- 2. The *hull* contains all the other ammunition parts. The hull is commonly made of brass, plastic or paper.
- 3. The *powder charge* is a chemical compound in the body of the hull which is ignited to propel the shot through the shotgun barrel.
- 4. The *primer* contains a chemical mixture that explodes when the firing pin strikes it. This ignites the powder charge.
- 5. Shotgun shells also contain one or more *wads*. The wad, made of paper or plastic, separates the powder charge from the shot or slug. This prevents hot gas from damaging the shot, seals the gases behind the charge and also holds the loose shot together as it travels through the barrel.

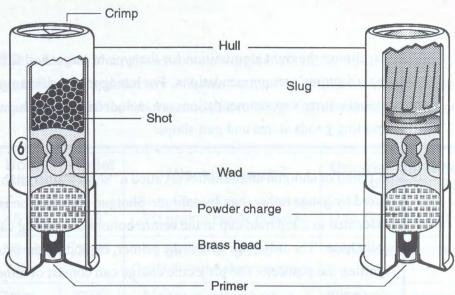


Figure 3 - 8 - Shotgun shells

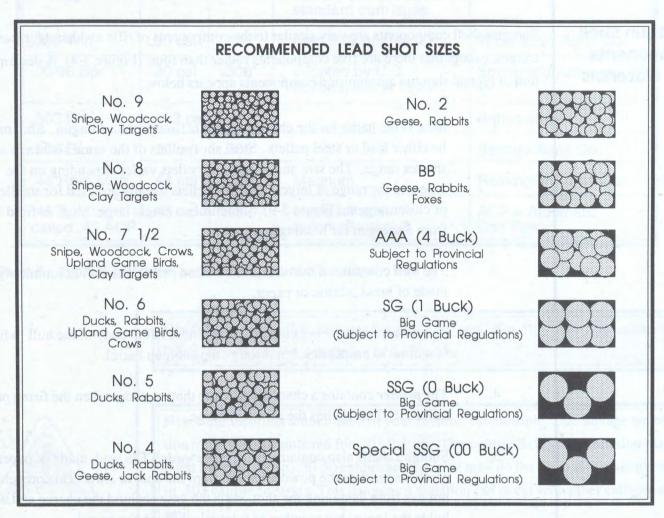


Figure 3 - 9 - Shot sizes

Shotgun Shell Types

Various types of shells exist. They vary in gauge, length and size and type of pellet (shot). In choosing the right ammunition for your target and firearm, follow the manufacturer's recommendations.

Shotgun barrels are classified by gauge instead of calibre. One exception to this rule is the .410 cal. shotgun which is a calibre measured in inches, i.e., .410 inches. Shotgun shells commonly come in several lengths - 2 3/4 inch (70mm), 3 inch (76mm) and 3 1/2 inch (89mm).

Recently, 3 1/2" magnum shells have been introduced.

The shotgun gauge is stamped on the barrel or action of most modern shotguns. (Figure 3-10) Also stamped on the barrel is information about shell length and type of choke. The gauge of a shotgun shell is printed on the base of the shell and also on the manufacturer's box. Read all of the above information to ensure that the ammunition matches the shotgun exactly. If in doubt, check with a gunsmith or a gun shop.

If there is no data stamp, take the firearm to a gunsmith for measurement and advice on proper ammunition.

Data Stamp on Shotgun Barrel

Figure 3 - 10
Shotgun shell
head, data stamp
and ammunition
box



Actual shell length may vary slightly from these sizes. The shell manufacturers "round off" the sizes shown on the boxes.

Accidents can also happen if 3 inch (76mm) shotgun shells are fired in 2 3/4 inch (70mm) chambers. **Do not attempt to use longer ammunition than indicated on the barrel data stamp**. Otherwise, the barrel might burst. (Figure 3-11)

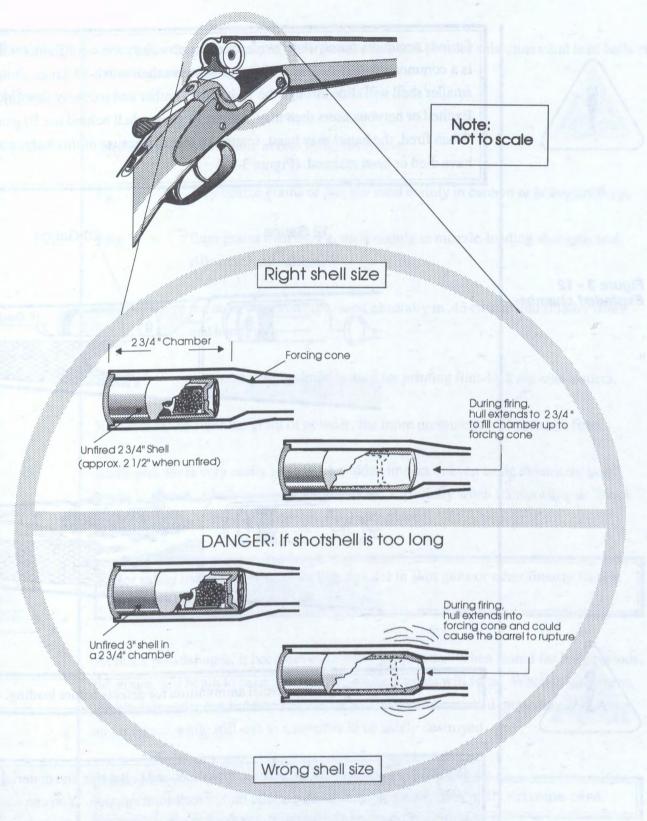
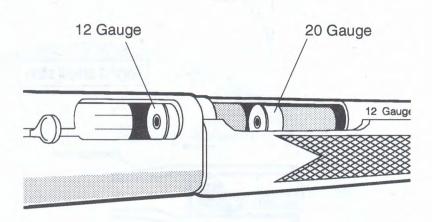


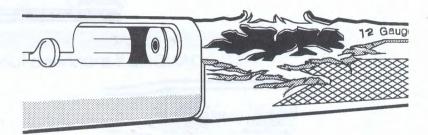
Figure 3 - 11 - Shell in chamber



Serious accidents occur when hunters or shooters carry the wrong ammunition. It is a common mistake to load a 20 gauge shotgun shell into a 12 gauge shotgun. The smaller shell will slide through the 12 gauge chamber and part way down the barrel. Excited or nervous users then may insert a 12 gauge shell behind the 20 gauge shell. When fired, the barrel may burst, scattering metal. Because of this error, people have died or been maimed. (Figure 3-12)

Figure 3 - 12 Exploded chamber







Visually inspect commercial ammunition for defects before loading.

For hunting, various provincial rules about shot and bullet size and material apply. Your course instructor can provide more precise information. You can also check with your local hunting authority for exact regulations.

Black Powder and Projectiles

Muzzle-loading firearms use black powder or black powder substitutes and lead balls or bullets as ammunition.

Black Powder

Black powder is available in four different types:

Fg very coarse grains of powder used mainly in cannon or heavy artillery;

FFg finer grains than the Fg, used mainly in muzzle-loading shotguns and

rifles over .50 calibre;

FFFg the most common type, used generally in .45 calibre and smaller rifles

and handguns;

FFFFg the finest grain; primarily used for priming flint-lock muzzle-loaders.

Remember, the finer the grain of powder, the more pressure it creates when fired.

Black powder is very easily ignited. A sudden impact or even static electricity may ignite it. Handle black powder with great care, especially when transporting it. Black powder should be stored in a secure, cool, dry place.



For safety reasons, never use FFFFg powder in shot guns or other firearm barrels intended for relatively low pressures.

As black powder ages, it becomes even more dangerous. When stored for long periods, the grains will begin to cake together and white crystals will form. When this happens, the black powder has become very unstable. It should be soaked immediately in water and returned while still wet to a supplier to be safely destroyed.



Black powder is easily ignited. Always handle with extreme care.

Black Powder Projectiles

Modern black powder or muzzle-loading firearms shoot three different types of projectiles:

- spherical a round ball usually loaded along with a patch;
- conical a tubular-shaped bullet, sometimes called a "slug"
 which come in various calibres and styles; and
- shot pellets of assorted sizes and materials.

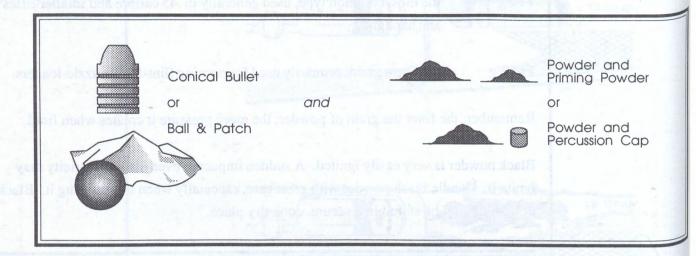


Figure 3 - 13 - Ammunition components for a muzzle-loader

Ballistics

Ballistics is the study of moving projectiles in flight and what affects them.

Every shooter should understand basic ballistics because of the distances modern firearms can shoot. Shotguns can fire shot more than the distance of a football field. Handguns can shoot a bullet more than one and a half kilometres and some rifles can shoot further than five kilometres. It is also important because different ammunition has different penetrating effects - i.e., the wrong projectile in hunting may simply go right through a game target rather than stop.

Ballistics tables for firearms and the ammunition tell you the *effective range* of ammunition, but bullets and shot can travel much farther than their effective ranges. To hunt or shoot safely, it is not only essential to know the effective range but also the *dangerous range*, i.e., how far that firearm and its ammunition will shoot. (See Charts 9, 10a and 10b)

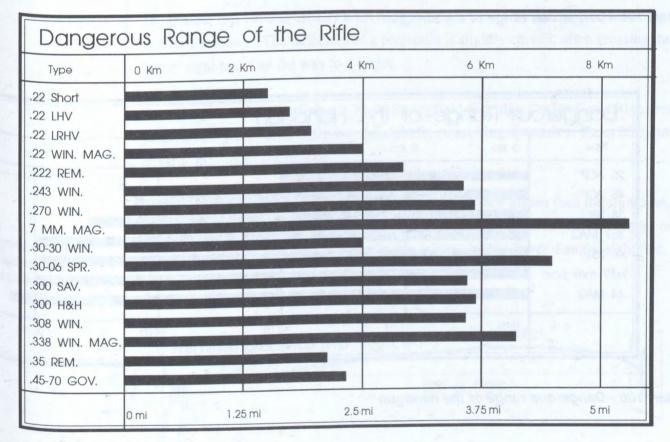


Chart 9 - Dangerous range of the rifle

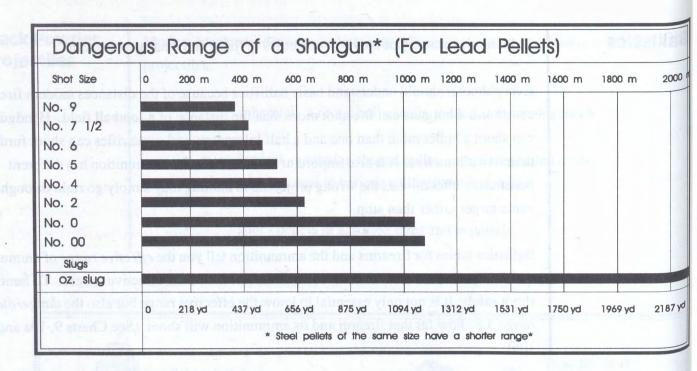


Chart 10a - Dangerous range of the shotgun

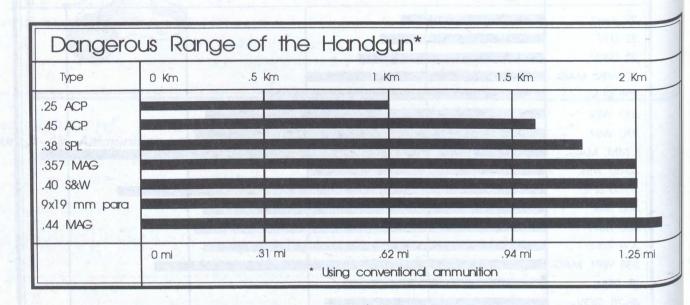


Chart 10b - Dangerous range of the handgun

Trajectory

Trajectory is the path of the shot or bullet during its flight. (Figure 3-14) Several forces affect this path - gravity, air resistance and the original amount of energy from the powder charge.

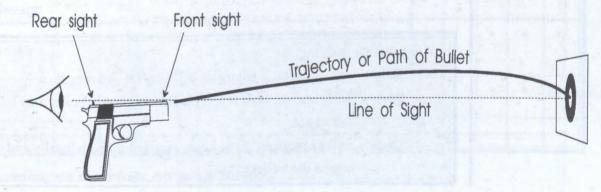
- 1. **Gravity** acts upon the bullet throughout its flight causing it to fall towards the ground as it is travelling forward. This results in a downward curved path.
- 2. Air resistance air resists the passage of the bullet slowing its flight.
- 3. **Energy** the strength of the "push" the bullet receives from the burning powder charge. For example, a .30-06 calibre cartridge contains much more powder than a .22 cal long-rifle bullet. Therefore, its bullet will travel farther and faster.

The muzzle of a firearm usually must be raised from the horizontal position to compensate for trajectory. The trajectory of a projectile is slightly curved, often crossing the line of sight twice on the way to a target.

For example, with a rifle firing a .30-06 Springfield cartridge, "zeroed" at 150 metres or yards, a 180-grain bullet will cross the sight line travelling upwards at about 25 metres or yards in front of the muzzle.

At about 100 metres or yards, it will be 2.5 cm or one inch higher than the sight line. It will come back down through the sight line at 150 metres or yards. At 200 metres or yards, the bullet will be over five centimetres or two inches lower than the sight line.

Figure 3 - 14 Trajectory of a bullet



Range and Impact



Identify what is beyond your target. If there is any reason your shot may be unsafe, do not fire it.

For those who intend to hunt, see Chart 11, Common Use Chart. For more information, consult your instructor or your Provincial or Territorial Hunter Safety/Education Coordinator.

It is important to know that the potential killing power or "impact" of various bullets varies with their shape, material, speed and weight. Therefore, the proper calibre of firearms and weight of bullet should be combined to match the type of target. (See Chart 12.)

Some ammunition types have been prohibited by Order in Council under the <u>Criminal</u> <u>Code</u>. These include:

- any cartridge that can be fired from a commonly available handgun and has a projectile designed to penetrate body armour;
- any projectile that can ignite on impact, is made to be used in or with a cartridge, and is not more than 15 mm in diameter;
- any projectile that can explode on impact, is made to be used in or with cartridge, and is not more than 15 mm in diameter; and
- any cartridge that can be fired from a shotgun and contains projectiles known as "flechettes" or any similar projectiles.

For details, see the legislation. From time to time, other types of ammunition may be added to the above list. It is your responsibility as a firearms user to keep up with such changes.

Responsible shooters:

- will shoot only at targets within effective range;
- will consider how much farther the shot or bullet may travel beyond the target;
- will be prepared to be held responsible, both legally and morally, for where the bullet stops.

uo	eight		ar	GA F	Sheep	Goat					bou	OT:	NA-H Sist	
Description	Bullet Weight in Grains	Deer	Black Bear	Antelope	Bighorn Sheep	Mountain Goat	Caribou	Moose	EIK	Grizzly	Groundhog	Fox	Coyote	Wolf
.22 Rimfire	40					9 6					•		15	
.222 Rem	50						- nei	Hopi			•	•	•	•
.22-250 Rem	55					e tu			y be		•	•	•	•
.243 Win	75 100	•	•	•		Y LA			18		•	•	•	•
.25-06 Rem	120		•	•	•	•	•					•	•	•
.25-35 Win	117	•	•				2.11	-801						27
.250 Savage	100	•	•	•			•	1000				•	•	•
.270 Win	130 160	•	:	•	•	:	:		•	•		•	0100	•
7x57 mm Mauser	139 160	•	•	•	•	•	:			•		•	•	•
7mm Rem Mag	175	•	•		•	•	•	•	•	•		gyli4	i No.	- 94
.30-30 Win	150 170		•	il and			•					•	•	•
.30-06 Springfield	150 180 220		:				:	:	:	:		•	•	•
.300Win Mag	180	010	sdia	ià la	môbi	•	•	•		•	bn. I			
.300Savage	150 180		•	15.5	•	:	•			- site		•	•	•
.303 Savage	190	•	•	3				-						
.303 British	150 180 215	•	:	:	:	•			:		10		•	•
.308 Win	150 180	•	•	•		•	:		•]	10.01		•	•	•
.32 Win Spec	170											1		

Chart 11 - Common use chart (rifle ammunition only)

FACTORS	VARIABL	ES
Target	Range Type of target	- distance to target - alive: large or small game - large or small practice targets - still or moving - speed of movement
a a svet	Target area	 angle of movement direction of movement nearby objects
with the state of	Location	backstopsurface type (ricochets)outdoors, indoorsproximity to inhabited areas
Geographic Conditions	Hilly or flat Open, heavily treed or brushy	To the Angelow Company of
Firearm	Type Centre-fire or rimfire Calibre/gauge	- shotgun, handgun or rifle - correct size for firearm
Rules,	Firing range rules	- correct size for target
Regulations, Legislation	Government regulations	The state of the s

Chart 12 - Selecting correct ammunition

Ammunition Storage and Transport Precautions and Legislation

Explosives information issued by Energy, Mines and Resources Canada indicates that people may keep on their residential or other property for their private use - and not fol resale - such quantities of sporting ammunition as they may reasonably require for a rifle, revolver or shotgun or for part of a collection.

They must take reasonable precautions against accidents, such as storing ammunition out of children's reach, keeping it away from flammables and storing it separately from the firearms in which it may be used. Contact Energy, Mines and Resources Canada for details.

All ammunition should be stored in a cool, dry place to reduce the chance of corrosion. Corroded ammunition can cause jamming or misfires when used in a firearm.

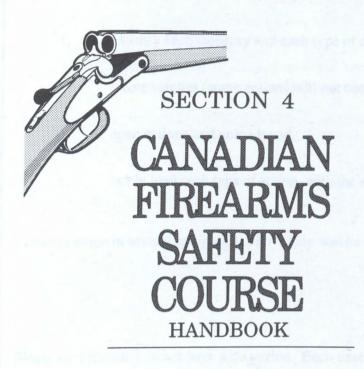
Ammunition Safety Points to Remember

- Carry ammunition only for the firearm you are using.
- Never experiment with unfamiliar shells and cartridges.
- Using modern ammunition in old firearms may be hazardous.
- When a misfire occurs, slowly count to sixty while pointing the muzzle in a safe direction. Then remove the cartridge and give it to an expert for disposal. DO NOT attempt to re-fire it. Also, carefully inspect the bore for obstruction.
- Never use old or corroded shells, cartridges or bullets.
- Never use military loads if you are not certain about their safe use.
- Smokeless powder develops more pressure than black powder. It must not be used in muzzle-loading black powder firearms.
- Store all ammunition so that unauthorized persons cannot access it.

Chart 13 - Ammunition Safety Points

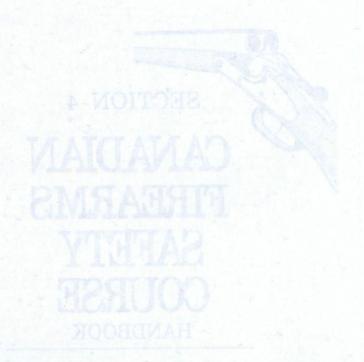


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OPERATING FIREARM ACTIONS

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OPERATING FIRHARM ACTIONS

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SECTION 4 OPERATING FIREARM ACTIONS

Introduction

To understand the safe use of firearms, you must learn how to identify what action a firearm uses, how that action works and how to know when it is unloaded.

This chapter first defines the different types and categories of firearms, and various safeties and action releases. Then it shows you how to:

- 1. identify each category and each type of action;
- 2. locate safeties (some actions will not open unless the safety is "OFF");
- 3. open actions and unload; and,
- 4. safely load each type of action, with the safety "ON", whenever possible.

Action Categories and Types

Firearms come in several categories. Here, they will be defined as:

Single Shot

Single shot firearms do not have a magazine. Each time it is loaded, one cartridge or shell must be inserted manually into the firing chamber. After firing, the action must be operated manually to remove the case or hull (See "Operating Single Shot Firearms");

Manual Repeating

Manual repeating firearms can be loaded with more than one round of ammunition, but each round is inserted into the chamber through some kind of manual action (See "Operating Manually Repeating Firearms");

Self-Loading Repeating

Self-loading repeating firearms can be loaded with more than one round of ammunition, and each round will be inserted into the chamber automatically after the previous round is fired (See "Operating Self-loading Repeating Firearms"); and,

Muzzle-Loading

Each barrel or chamber can be loaded with only one round of ammunition at a time, and must be loaded through the muzzle (See "Muzzle-loading and Antique Firearms").

Firearms are also generally classified by their type of action. (Figure 4-1) The six basic types are:

Similar to a door bolt and can be single shot or manually repeating;

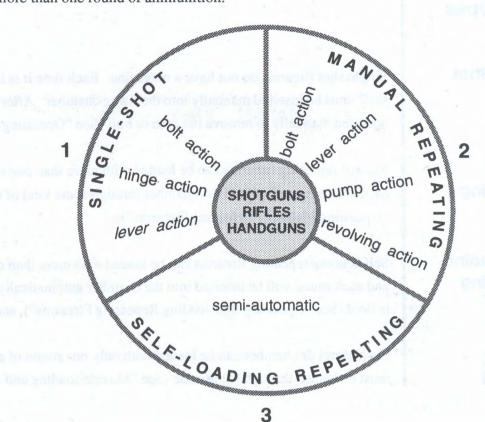
Lever action has a metal handle just behind the trigger and commonly is manually repeat

Opens near the breech and is usually single or double shot;

Works by pumping the fore-end of the stock back and forth and is manually repeating;

Expels empty cases and reloads another round in the chamber automatically and is four in self-loading repeating rifles, shotguns and handguns.

Used for some handguns. It has several chambers in a rotating cylinder and can contain more than one round of ammunition.



Bolt action

Lever action

Break or hinge action

Pump action

Semi-automatic action

Revolving action

Chart 14 Action categories and types

SECTION 4 OPERATING FIREARM ACTIONS

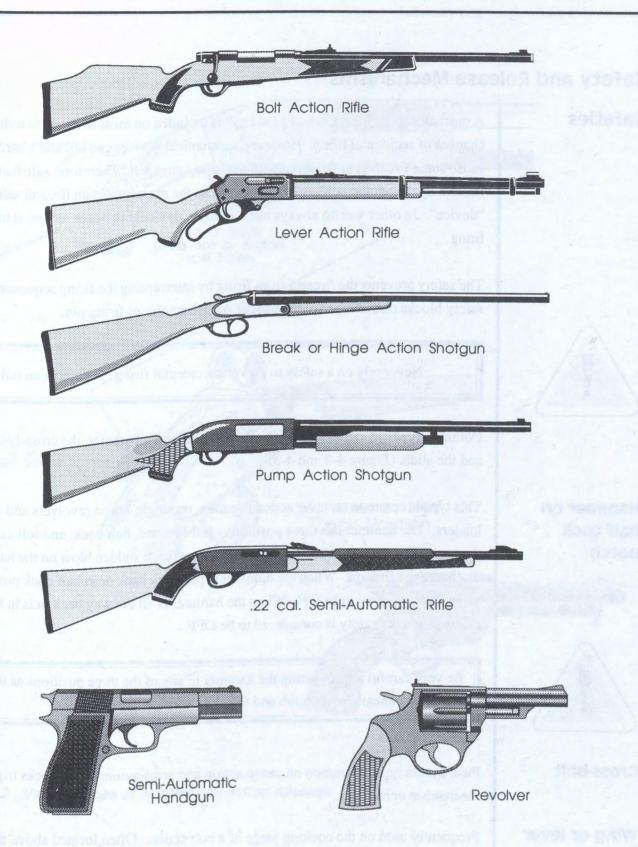


Figure 4 - 1 Types of actions

Safety and Release Mechanisms

Safeties

A mechanical device known as a "safety" is included on most firearms to reduce the chances of accidental firing. However, mechanical devices can fail and a hard blow call cause some firearms to fire even with the safety engaged. Therefore, safe handling of a firearm by the person holding it will always be the most important firearm safety "device". In other words, always use the safety device, but never rely on it to prevent firing.

The safety prevents the firearm from firing by interrupting the firing sequence. The safety blocks one or more of the trigger, sear, hammer or firing pin.



Never rely on a safety to prevent accidental firing. A safety can fail.

Common types of safeties are the half cock notch on a hammer, the cross-bolt, the $w^{jn\beta}$ and the slide. (Figure 4-2 and 4-3)

Hammer on half cock notch

This type is common on lever action firearms, on single action revolvers and on muzzle loaders. The hammer has three positions - full forward, half cock, and full-cock. When the hammer is fully forward resting on the firing pin, a sudden blow on the hammer can discharge the firearm. When the hammer is part way back or in half cock position, the safety is considered to be ON. When the hammer is all the way back, it is in full-cock position and the safety is considered to be OFF.



Be very careful when placing the hammer in any of the three positions as it could slip from beneath your thumb and fire the cartridge.

Cross-bolt

Push button type. Common on pump action and semi-automatics. Blocks trigger mechanism or hammer.

Wing or lever type Frequently used on the cocking piece of a bolt action. Often located above the trigger area on the left or right side of the bolt. (Figure 4-3)

SECTION 4 OPERATING FIREARM ACTIONS

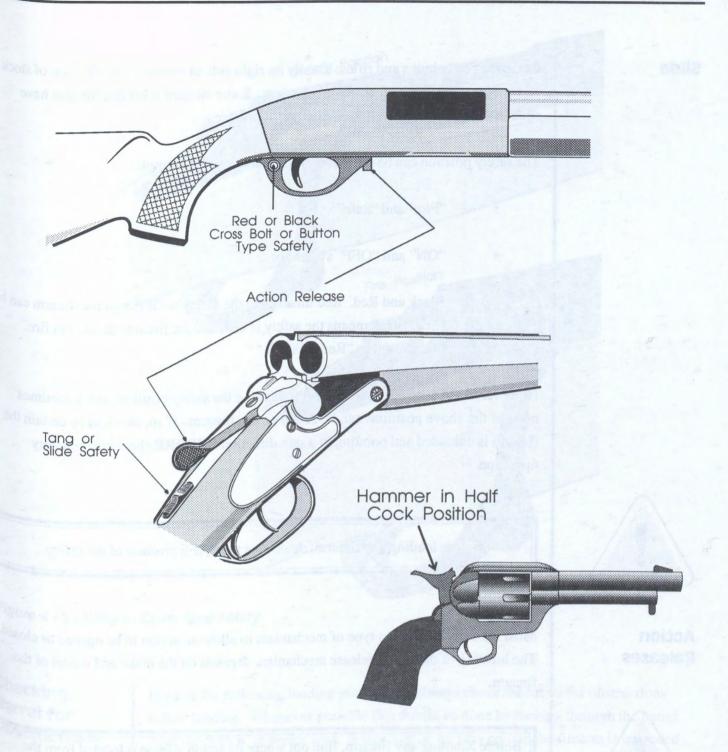


Figure 4 - 2 - Various types of safeties and action releases

Safety and Release Mechanisms

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A mechanical device known as a "safety" is included on most firearms to reduce the chances of accidental firing. However, mechanical devices can fail and a hard blow can cause some firearms to fire even with the safety engaged. Therefore, safe handling of a firearm by the person holding it will always be the most important firearm safety "device". In other words, always use the safety device, but never rely on it to prevent firing.

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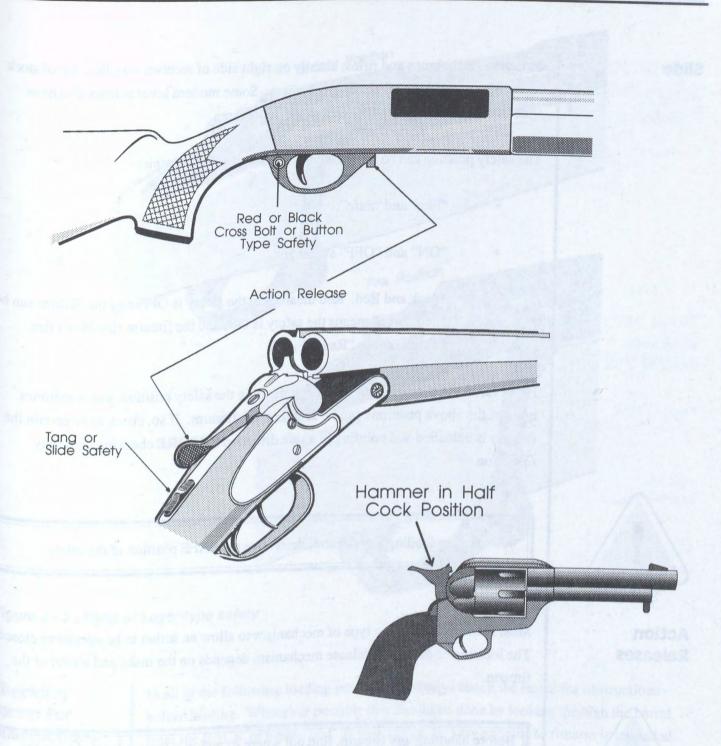


Figure 4 - 2 - Various types of safeties and action releases

Slide

Common on shotguns and rifles: usually on right side of receiver on rifles, top of stock on shotguns. It blocks the firing mechanism. Some modern lever actions also have slide or button type safeties located in the action area.

The safety position can be indicated in several ways; for example:

- "Fire" and "Safe";
- "ON" and "OFF" switch; or
- Black and Red. Red means that the safety is OFF, and the firearm can be fired; Black means the safety is ON, and the firearm should not fire.

 (Think of it as "Red = Fire").

However, there is no standard rule for indicating the safety position, and sometimes none of the above positions can be found on the firearm. If so, check to be certain the firearm is unloaded and pointing in a safe direction **BEFORE** checking the safety operation.



Before loading any firearm, determine the SAFE position of the safety.

Action Releases

Most firearms have some type of mechanism to allow an action to be opened or closed. The location of the action release mechanism depends on the make and model of the firearm.



Before handling any firearm, find out where its action release is located from the owner's manual or a firearms expert.

SECTION 4 OPERATING FIREARM ACTIONS

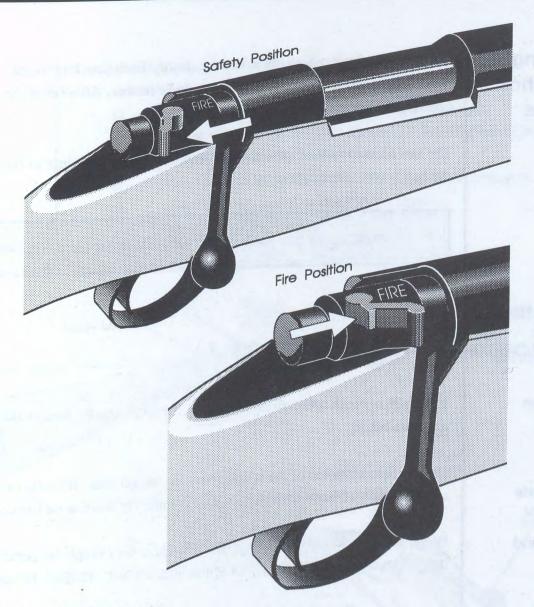


Figure 4 - 3 - Wing or Lever-type safety

Checking Barrel for Obstructions

In all of the following loading procedures, **always** check the barrel for obstructions before loading. Whenever possible this should be done by looking through the barrel from the BACK or breech end. If you cannot, be very certain the firearm is unloaded and the action is open and chamber empty BEFORE looking down the barrel from the muzzle end. Some shooters prefer to run a rod through the barrel before loading, rather than looking down the barrel. Use normal cleaning procedure to remove an obstruction or take the firearm to an expert.

Operating Single Shot Firearms

A single shot firearm does not have a magazine. Each time it is loaded, one cartridge of shell must be inserted manually into the firing chamber. After firing, the action must be operated manually to remove the case or hull.

The two most common types of single shot firearms are the hinge or break action and the bolt action. Here is how they work.

Hinge action firearms often have more than one barrel. (Figure 4-4)

Hinge Action: Single or Double Barrel

Description

Safety Mechanisms

To Open and Unload

The hinge or break action firearm opens or "breaks" near the breech like the movement of a door hinge.

Usually located on top of the action above the trigger area. It is often a slide type safety or exposed hammer which must be completely down or on half cock to be safe.

Hinge actions are used mainly in shotguns and are very simple in operation. On top of the gun above the trigger area is an action release lever. To open the action:

- a) Point firearm in safe direction with finger off trigger.
- b) Move the action release lever to the right or left. Note: If release lever will not move, the safety may need to be moved to OFF position. The breech will open as the barrel drops downward leaving the chamber or chambers in view.
- c) The barrel opening movement usually ejects any cartridges or shells that were in the chamber.

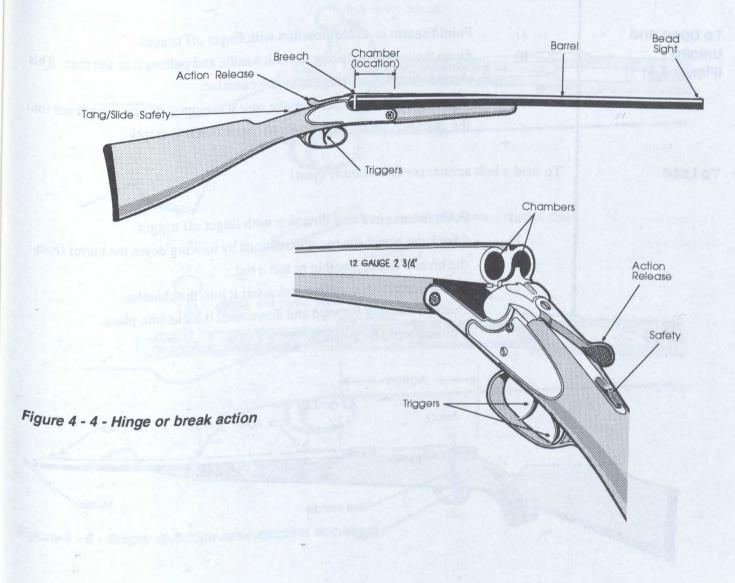
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SECTION 4 OPERATING FIREARM ACTIONS

To Load

To load a hinge action: (action already open)

- a) Point firearm in safe direction with finger off trigger.
- b) Check barrel for obstructions by looking down the barrel from the breech (back) end if possible.
- c) Select correct ammunition and insert it into the chamber(s).
- d) Snap the action closed with a firm movement.
- e) Put safety in ON position.



Bolt Action: Single Shot

Description

A bolt action firearm operates something like a door bolt. This action is very strong and is most often used on rifles. (Figure 4-5)

Safety Mechanisms

It is usually located on top of the action above the trigger area on the left or right side of the bolt. This is often a lever type safety but can also be a slide type located directly behind the bolt.

To Open and Unload (Figure 4-6)

- a) Point firearm in a safe direction with finger off trigger.
- b) Open the action by lifting the bolt handle and pulling it to the rear. This should eject the cartridge from the chamber.
- c) Visually check chamber to make sure it is empty. If you cannot see into the chamber, insert your finger to check that it is empty.

To Load

To load a bolt action: (action already open)

- a) Point firearm in a safe direction with finger off trigger.
- b) Check the barrel for any obstructions by looking down the barrel from the breech end if possible or use a rod.
- c) Select correct ammunition and insert it into the chamber.
- d) Push bolt handle forward and down until it locks into place.
- e) Put safety in ON position.

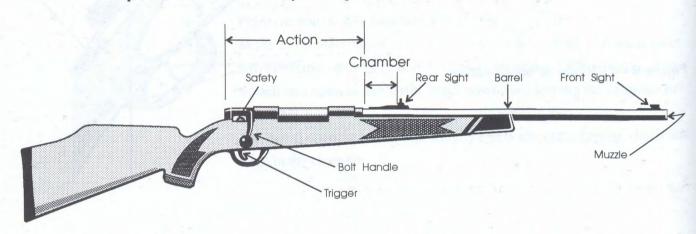


Figure 4 - 5 - Bolt action

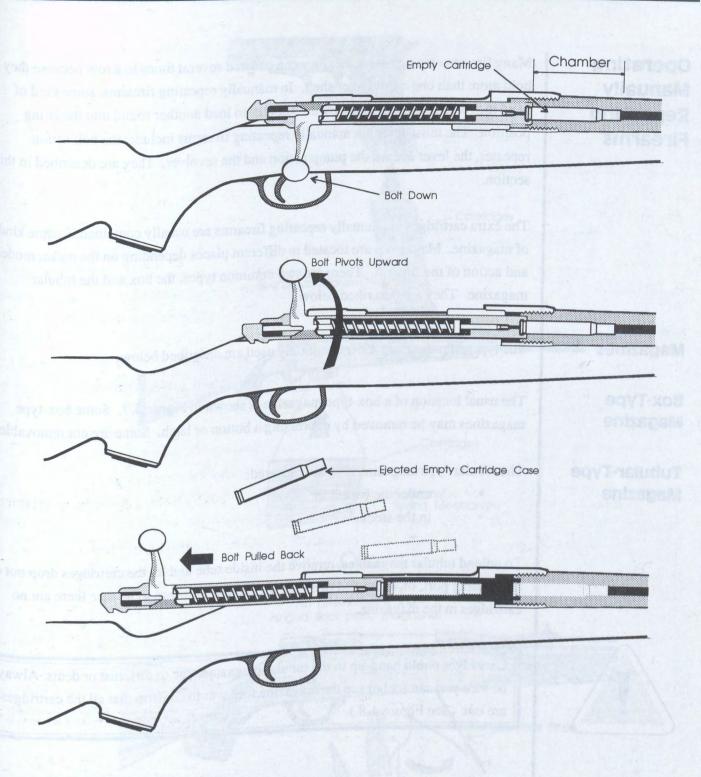


Figure 4 - 6 - Empty cartridge case ejection sequence

Operating Manually Repeating Firearms

Many firearms are repeaters: i.e. they can be fired several times in a row because they hold more than one cartridge or shell. In manually repeating firearms, some kind of hand movement must be made by the shooter to load another round into the firing position. The most common manually repeating firearms include: the bolt action repeater, the lever action, the pump action and the revolver. They are described in this section.

The extra cartridges in manually repeating firearms are usually contained in some kind of magazine. Magazines are located in different places depending on the make, model and action of the firearm. There are two common types, the box and the tubular magazine. They are described below.

Magazines

The types of magazines most commonly used are described below.

Box-Type Magazine

The usual location of a box-type magazine is shown in Figure 4-7. Some box-type magazines may be removed by depressing a button or latch. Some are not removable.

Tubular-Type Magazine

The tubular-type magazine is usually located:

- under the barrel; or
- in the stock.

To unload tubular magazines, remove the inside tube and let the cartridges drop out of the loading port, or, close and open the action several times to be sure there are no cartridges in the magazine.



Cartridges could hang-up in the tubular magazine, due to dirt, rust or dents. Always be sure you can feel or see the magazine follower to confirm that all the cartridges are out. (See Figure 4-8.)

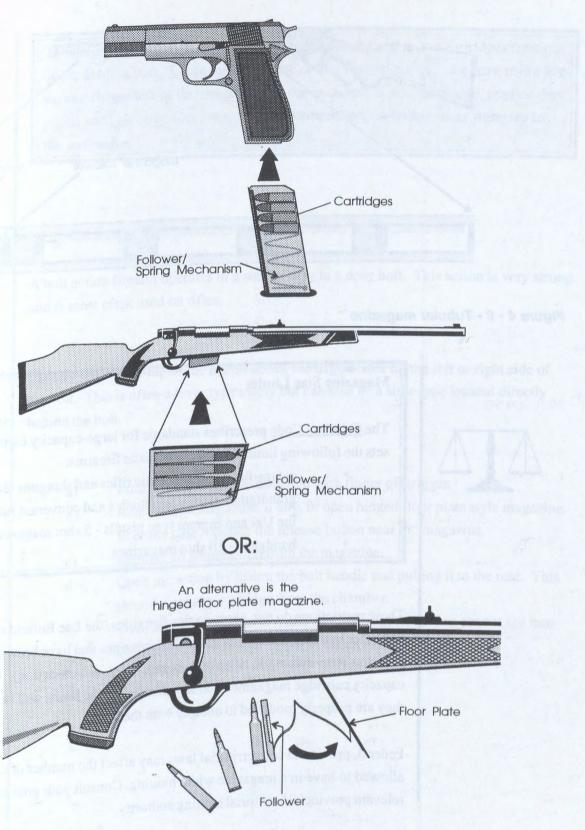


Figure 4 - 7 - Box-type magazines

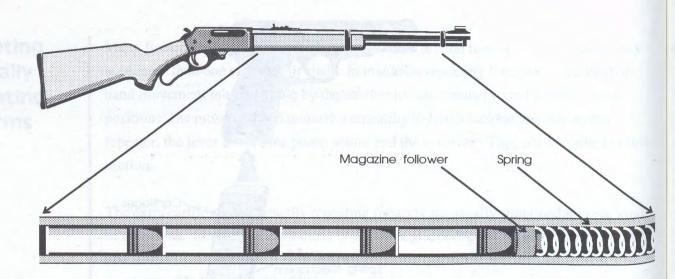


Figure 4 - 8 - Tubular magazine



Magazine Size Limits

The <u>Criminal Code</u> prescribes standards for large-capacity cartridge magazines. It sets the following limits for semi-automatic firearms:

- centre-fire semi-automatic rifles and shotguns including grandfathered fully automatics and converted fully automatics, and the Uzi and Ingram type pistols - 5 shot magazines;
- handguns 10 shot magazines.

These restrictions do not apply to rim-fire rifles, the Lee Enfield rifle, M-1 Garand rifle and other rare and historically valuable magazines that have been specifically exempt, plus non semi-automatic rifles (e.g.-pump, lever, or bolt-action). Owners of large capacity cartridge magazines that are affected by the limits will be able to retain them if they are properly modified to comply with the limits.

Federal, provincial and territorial laws may affect the number of cartridges you are allowed to have in a magazine while hunting. Consult your course instructor or your relevant provincial/territorial hunting authority.

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To unload tubular magazines, remove the inside tube and let the cartridges drop out of the loading port. Close and open the action several times to be sure there are no cartridges left in the magazine. If the magazine is not removable, operate the action until all cartridges are extracted. Remember, cartridges may hang up in the magazine.

Bolt Action: Repeaters

Description

A bolt action firearm operates in a similar way to a door bolt. This action is very strong and is most often used on rifles.

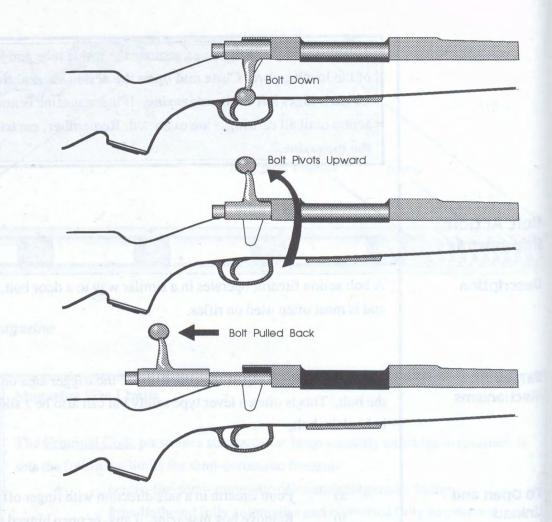
Safety Mechanisms

Usually located on top of the action above the trigger area on the left or right side of the bolt. This is often a lever type safety but can also be a slide type located directly behind the bolt.

To Open and Unload

- a) Point firearm in a safe direction with finger off trigger.
- b) Remove box magazine, if any, or open hinged floor plate style magazine. In either case, operate the release button near the magazine.
- c) Remove all ammunition from the magazine.
- d) Open the action by lifting the bolt handle and pulling it to the rear. This should eject any cartridge from the chamber.
- e) Look into the chamber to make sure it is empty. If you cannot see into the chamber, insert your finger to check that it is empty.

Figure 4 - 9 Bolt action repeater



To Load

To load a manually repeating bolt action: (action already open)

- a) Point firearm in a safe direction with finger off trigger.
- b) Check the barrel for any obstructions by looking down the barrel from the breech end if possible or use a rod.
- c) Select correct ammunition and insert it into the magazine.
- d) If removed, insert the magazine into place.
- e) Push bolt handle forward and down until it locks into place. This will load a live cartridge into the chamber.
- f) Put safety in ON position.

Detachable box style magazines can be removed as a unit, either empty or containing ammunition, by operating the release button near the magazine.

Lever Action: Repeaters

Description

A lever action firearm has a metal handle located just behind the trigger. This action is most often used on rifles. (Figure 4-10)

Safety Mechanisms

In most cases, the lever action safety is an exposed hammer. The hammer has three positions - forward, half cock and full-cock. When the hammer is in 'half cock' position, the safety is considered to be ON. When the hammer is all the way back, it is in full-cock position and the safety is considered to be OFF. However, when the hammer is fully forward resting on the firing pin, a sudden blow on the hammer can discharge the firearm.

Also, this type of lever action often will not fire unless the lever is fully squeezed against the stock.

Some modern lever action firearms also have slide or button type safeties located in the action area.

To Open and Unload

- a) Point firearm in safe direction with finger off trigger.
- To unload tubular magazines, remove the inside tube and let the cartridges drop out of the loading port. If the magazine is not removable, operate the action by cycling the lever up and down until all cartridges are extracted. **Double check** to ensure all ammunition is out of this type of magazine.
- c) Leave the action open by leaving the lever handle down.
- d) Look into the chamber to make sure it is empty. If you cannot see into the chamber, insert your finger to check that it is empty.

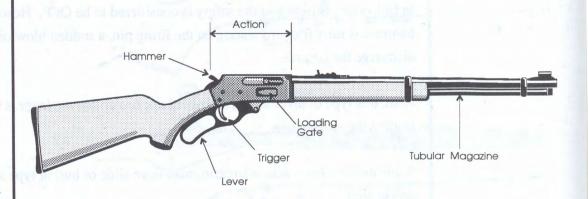
To Load

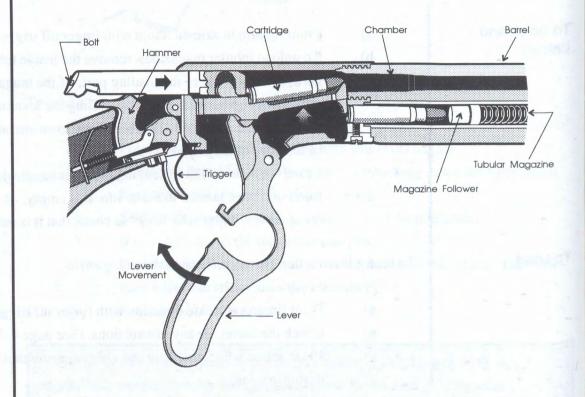
To load a lever action repeater: (action already open)

- a) Point firearm in a safe direction with finger off trigger.
- b) Check the barrel for any obstructions. (See page 4-7)
- c) Close action while watching chamber to ensure that it remains empty during loading.

- d) Raise the hammer into half cock position so the safety is ON.
- e) Select correct ammunition and insert it into the magazine.
- f) Insert the magazine if not already in place.
- g) Operate lever once to load a live cartridge into the chamber. The hammer will be in the full-cock position.
- h) Lower the hammer into half cock position so the safety is ON or engage mechanical safety, if present.

Figure 4 - 10 Lever action





Pump Action: Repeaters

Description

The pump action firearm is sometimes called the slide or trombone action because the fore-end of the stock is pumped back and forth to operate the action. It permits rapid reloading with a simple movement of the firearm supporting hand without moving the muzzle away from the target. This action is most commonly used on shotguns. (Figure 4-11) Either a box or a tubular magazine may be used.

Safety Mechanisms

Most modern pump actions have slide or button type safeties located in the action area. The button type is usually at the front of the trigger guard. The slide type frequently is on top of the action.

To Open and Unload

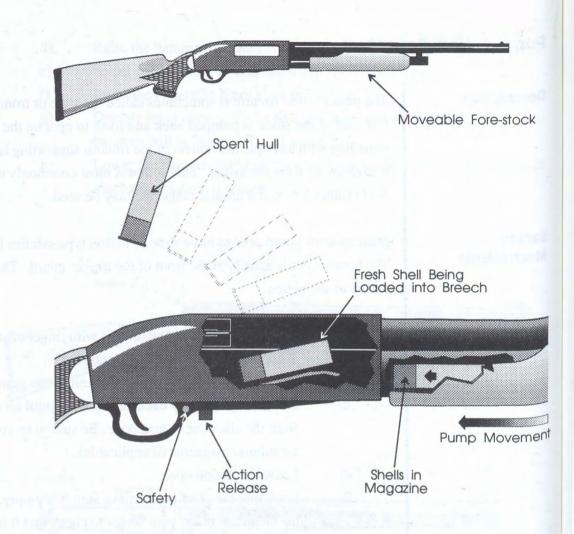
- a) Point firearm in a safe direction with finger off trigger.
- b) If applicable, remove box magazine.
- c) Operate action release button to unlock the pump mechanism.
- d) Cycle the pump grip back and forward until all cartridges are extracted from the chamber or magazine. Be sure to remove **all** ammunition from the tubular magazine (if applicable).
- e) Leave the action open.
- f) Look into the chamber to make sure it is empty. If you cannot see into the chamber, insert your finger to check that it is empty.

To Load

To load a pump action repeater: (action already open)

- a) Point firearm in a safe direction with finger off trigger.
- b) Check the barrel for any obstructions. (See page 4-7)
- c) Close action while watching chamber to ensure that it remains empty during loading.
- d) Select correct ammunition and insert it into the magazine.
- e) Operate pump once to load a live cartridge into the chamber.
- f) Place safety in ON position, if it is not already ON.

Figure 4 - 11 Pump action



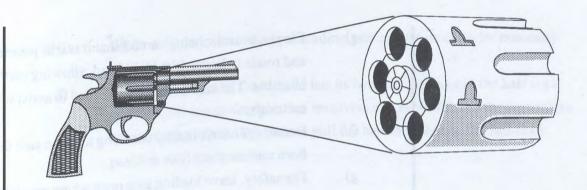
Revolving Actions:

Description

The revolving action takes its name from a revolving cylinder containing a number of cartridge chambers. One chamber at a time lines up with the barrel as the firearm is fired. Revolver cylinders may rotate either clockwise or counter-clockwise depending on the manufacturer.

Revolvers are either single action or double action. Single action means that the hammer must first be hand cocked before the gun can be fired by pulling the trigger. i.e.- a single action of the trigger fires the gun. A double action revolver is both cocked and fired by pulling the trigger. Therefore, the trigger performs two actions during one pull.

Figure 4 - 12 Revolver cylinder



Double-action revolvers normally will operate as single actions as well.

Safety Mechanisms

Modern revolvers usually have internal safeties designed to prevent them from firing accidentally. Double action revolvers also rely on strong double-action trigger pull (approximately 6 kilograms or 13 lbs pressure, compared to a single-action trigger pull of approximately 1.5 kilograms or 3 lbs) as a further safety barrier to accidental firing.

Whether you are left or right-handed, follow all of the handgun loading and unloading procedures exactly in the way described. Persons with hand or arm disabilities may have to modify these directions as necessary.

To Open and Unload (Single-action)

(i) Single-action Revolver Opening and Unloading: (Figure 4-13)

Procedures may vary slightly depending on the manufacturer.

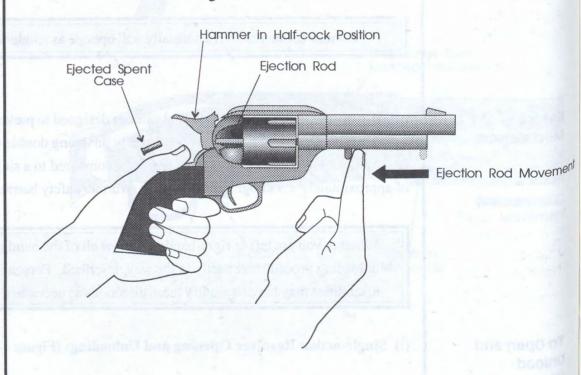
- a) Point revolver in a safe direction with finger off trigger, hold revolver in left hand.
- b) With the right thumb, open loading gate.
- c) With the right thumb, pull hammer to half cock position. This will allow the cylinder to turn freely.
- d) Align chamber with opening.

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- e) Elevate muzzle, being careful that it is **still pointed in a safe direction**, and rotate cylinder with right hand, allowing cartridges to fall out of chamber. The ejector rod may be used to assist with removal of cartridges.
- f) Rotate cylinder, visually checking to make sure that all cartridges have been removed.
- g) For safety, leave loading gate open where possible. This usually locks the hammer so the gun cannot fire.

Figure 4 - 13 Single-action revolver unloading

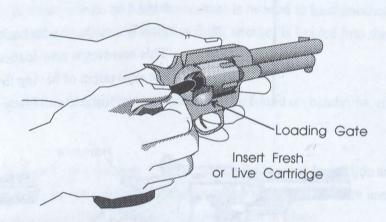


To Load (Single-action)

- (ii) Single-action Revolver Loading: (action already open) (Figure 4-14)
 - a) Point revolver in a safe direction with finger off trigger, holding the revolver in left hand, muzzle pointing to the ground.
 - b) Check barrel for obstructions or use a rod.
 - c) Ensure hammer is in half cock position, loading gate is open and an empty chamber is lined up with the gate.
 - d) Select correct ammunition and insert one cartridge at a time with the right hand through loading gate while manually rotating cylinder into position.

- e) When cylinder is loaded, close loading gate and rotate cylinder manually until it locks.
- This revolver is now loaded and has its hammer down or in the half cock position. On newer single action revolvers this is considered the equivalent of having the safety ON. **Do not** pull the hammer back to the full-cock position until ready to fire.

Figure 4 - 14 Single-action revolver loading



To Open and Unload (Double-action)

(iii) Double-action Revolver Opening and Unloading:

- a) Point revolver in a safe direction with finger off trigger, holding the revolver in right hand.
- b) Operate cylinder release latch with right thumb. (The cylinder release is generally located near the cylinder.)
- c) With revolver still pointed in a safe direction, push cylinder open with two middle fingers of the left hand.
- d) Place left thumb on ejector rod.
- e) Elevate muzzle about 60 degrees, being careful that it is still pointed in a safe direction, and firmly push the ejector rod completely to the rear.
- f) Tilt muzzle about 45 degrees to the ground and look into each cylinder/chamber to ensure that all cartridges have been removed.

Once again, for safety, leave the cylinder open where possible.

To Load (Double-action)

iv) Double action Revolver Loading: (action already open)

- a) Point revolver in a safe direction with finger off trigger, hold revolver in right hand.
- b) Check barrel for obstructions or use a rod.
- c) Place correct ammunition into each chamber of the cylinder with the left hand.
- d) Gently swing cylinder back into place and rotate until it locks.
- e) This revolver is now loaded with the hammer down. This is considered the equivalent of having the safety ON. **Do not** pull the hammer back of squeeze trigger until ready to fire.

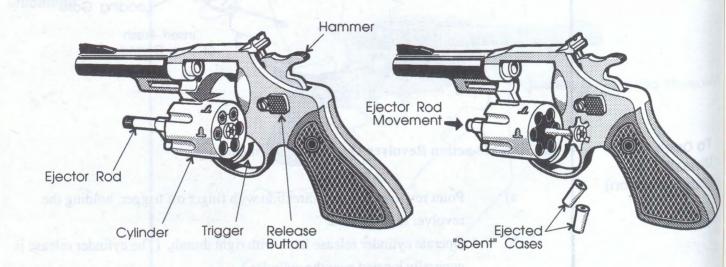


Figure 4 -15 - Double-action revolver unloading

Operating Self-loading Repeating Firearms

Semi-automatic Action: Rifles, Shotguns and Pistols

Description

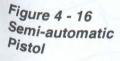
With each pull of the trigger, the semi-automatic action uses part of the energy of the expanding gas from the burning powder to extract the empty cartridge case and to reload the chamber. In other words, no hand movement is needed to load another round into the firing position; each time a round is fired, another is loaded into the chamber. (Figure 4-16)

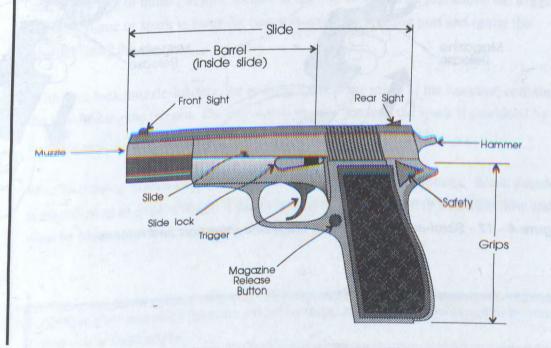
Also called the self-loader or auto-loader, this action can be found on handguns, rifles and shotguns.

Safety Mechanisms

Semi-automatic safeties vary considerably. Commonly used are cross-bolt, slide and button types. Occasionally, internal safeties such as a magazine disconnect are used. These prevent the firearm from firing when the magazine is not in place.

Safeties are usually located near the hammer.





To Open and Unload (Figure 4-17)



- b) Release magazine and remove from gun. Location of the magazine release will vary. Consult owner's manual or competent gunsmith.
- c) Open the action by pulling back the bolt handle or slide. This should eject any cartridge that may be in the chamber.
- d) Some semi-automatics have a slide lock that will keep the slide open. Use it, if present.
- Look into the chamber to make sure it is empty. If you cannot see into the chamber, insert your finger to check that it is empty.



Be careful the action does not close suddenly on your finger.

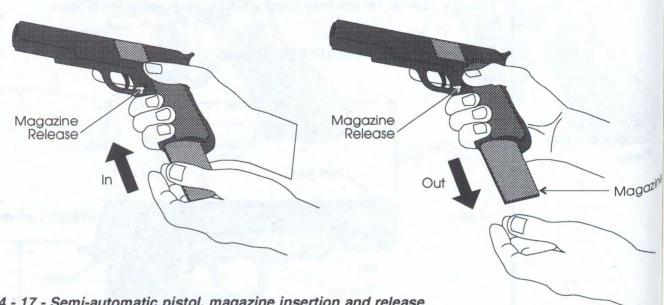


Figure 4 - 17 - Semi-automatic pistol, magazine insertion and release

To Load

To load a semi-automatic firearm: (action already open)

- a) Choose the right ammunition and insert it into the magazine.
- b) Point firearm in a safe direction with finger off trigger.
- c) Check the barrel for any obstructions. (See page 4-7)
- d) Insert loaded magazine into firearm until secured.
- e) Release the slide by depressing the slide lock so the action closes firmly. This will load a live cartridge into the chamber.
- f) Place safety in ON position.

Muzzle-loading and Antique Firearms

Muzzle-loading muskets, pistols, rifles and shotguns are still in use today. However, most modern muzzle-loaders are replicas of older designs. (Figure 4-18)

As described earlier, this type of firearm is loaded through the muzzle end. A measured amount of powder is poured through the muzzle into the barrel and followed by a patch and a lead ball or bullet. A hole located at the rear of the barrel just above the trigger allows a flame or spark to enter the barrel through the priming port and ignite the powder firing the charge.

With flint-lock muzzle-loaders, the igniting spark is the result of the hammer, containing the flint, hitting the frizzen. On percussion muzzle-loaders, the spark is produced by the hammer striking a percussion cap.

Muzzle-loading firearms use black powder or black powder substitutes. Black powder is classified as an explosive and is easily ignited by heat, friction or a sudden blow and must be handled with **extreme care**.



Antique guns and older firearms should be inspected by a firearms expert to be sure they can be fired safely.

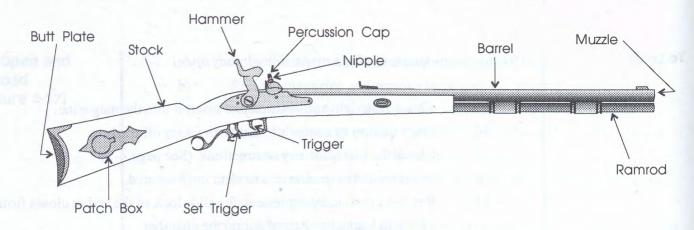


Figure 4 - 18 - Muzzle-loader

Loading Muzzle-Loaders

Today, the safest guns for black powder use are reproductions of muzzle-loaders. Old guns or antique guns may not be safe to fire and should be checked by a gunsmith before use.

If a muzzle-loader is not primed to fire, it is safe to handle. To ensure that a muzzle-loader is not primed to fire:

- a) Point the muzzle in a safe direction and keep finger off the trigger.
- b) Check that the hammer is **not** in full cock position.
- c) Check for a percussion cap or to see if the priming pan is primed.
- d) If the firearm is primed, remove cap or priming powder.

In addition, it is difficult to tell if there is already a charge loaded in the barrel of a muzzle-loader. Experienced shooters mark the gun's ramrod at a level which shows the bore depth when the bore is empty. When the marked ramrod is inserted in the barrel, it shows whether or not the gun is loaded. (See Figure 4-19)

Loading muzzle-loaders is a potentially dangerous process. Before attempting it, get the assistance of an expert and/or carefully follow the instructions in your owner's guide.

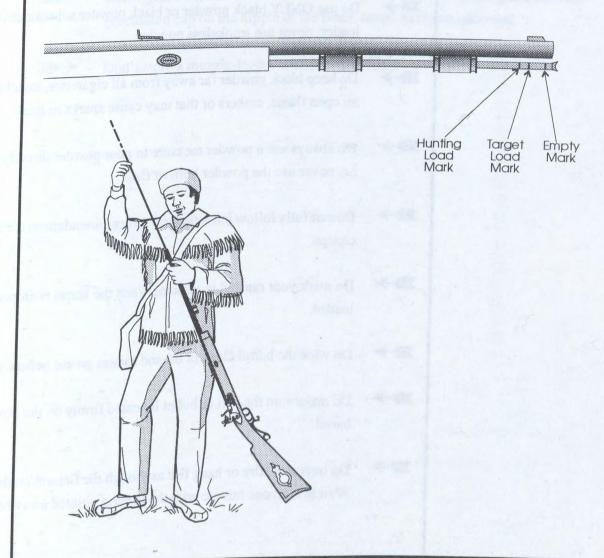


It is not easy to tell if a muzzle-loader is loaded. If you suspect that a muzzle-loading firearm may be loaded, do not try to unload or fire it yourself. Have a qualified expert unload the gun.



Figure 4 - 19 Correctly marked ramrod

- 1. Never use smokeless powder.
- 2. Always use a measure to put powder into the muzzle; never pour directly from the main powder container.
- 3. Be sure that no burning embers are left in the barrel from the previous shot before loading by running a solvent patch down the barrel before reloading.



Under the safe storage regulations, black powder firearms are loaded when powder is in the barrel.

Do's and Don'ts of Muzzle-loading

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- Do have old muzzle-loading firearms dismantled, examined and declared safe by an expert before using them.
- Do handle the muzzle-loader with the same respect due all firearms.
- Do use ONLY black powder or black powder substitutes in your muzzleloader; never use smokeless powder.
- Do keep black powder far away from all cigarettes, matches or anything with an open flame, embers or that may cause sparks or heat.
- Do always use a powder measure to pour powder directly into the muzzle, i.e. never use the powder horn or flask.
- Do carefully follow manufacturer's recommendations for maximum powder charge.
- Do mark your ramrod to indicate when the barrel is empty and when it is loaded.
- Do wipe the barrel clean of oil and excess grease before you load.
- Do make sure the ball or bullet is seated firmly on the powder charge in the barrel.
- Do treat a misfire or hang fire as though the firearm could fire at any second.

 Wait at least one minute with the firearm pointed away before re-firing.

DON'T

- Don't carry or handle a muzzle-loading firearm with the hammer at full cock and primed unless you are ready to fire.
- Don't lean over or stand in front of the muzzle at any time.
- Don't use plastic or synthetic patches.
- Don't reload one barrel of a double barrelled muzzle-loading shotgun unless the percussion cap on the nipple of the other barrel has been removed.
- Don't store a muzzle-loader with powder in it.

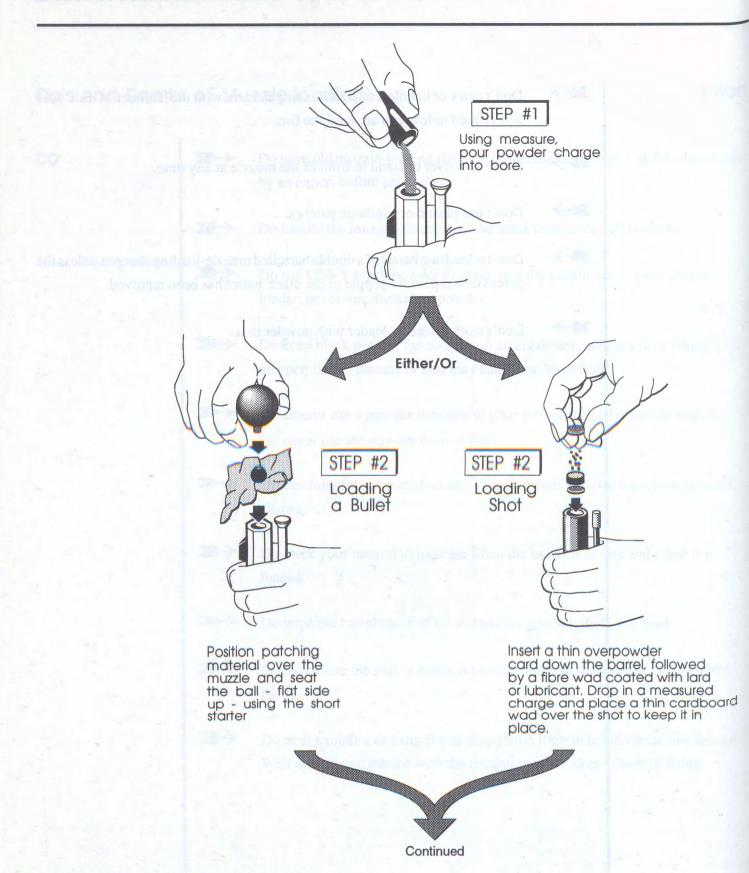


Figure 4 - 20 - Loading a muzzle-loader

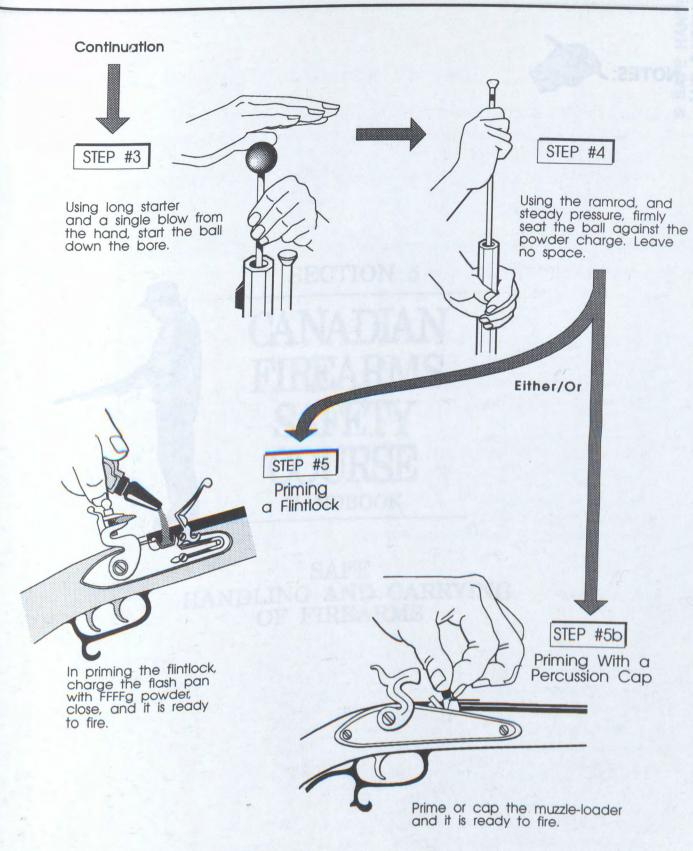
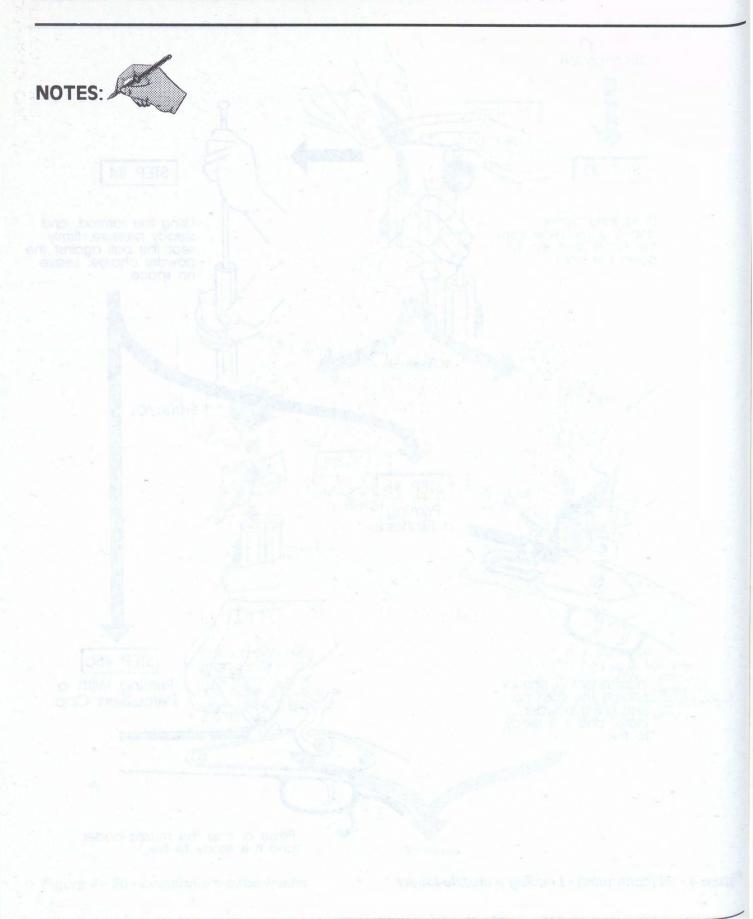
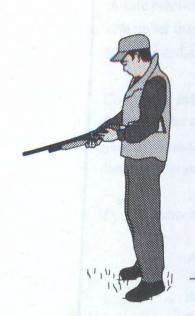


Figure 4 - 20 (continued) - Loading a muzzle-loader





SECTION 5

CANADIAN FIREARMS SAFETY COURSE

HANDBOOK

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CANADIAN FIREARMS SAFEIY COURSE COURSE

Safe Handling and Carrying of Firearms in the Field



This chapter shows you how to safely handle firearms when in the field, when hunting or shooting with a group, when entering or leaving vehicles, and when at a firing range.

Remember the second rule or "key"-

Load the firearm only for actual use.

A safe practice is not to chamber a cartridge until ready to fire. In the field, always remember that people or livestock may be standing out of your view, yet close enough to be injured, i.e. within the dangerous range of your firearm and ammunition.

Control the muzzle. Keep safety on until ready to fire. Protect the trigger of your firearm under all circumstances. A twig may pull the trigger or a branch may swing the muzzle around. Falls are common on slippery rock, fallen timber or icy ground and are dangerous to yourself and your companions unless you are prepared.

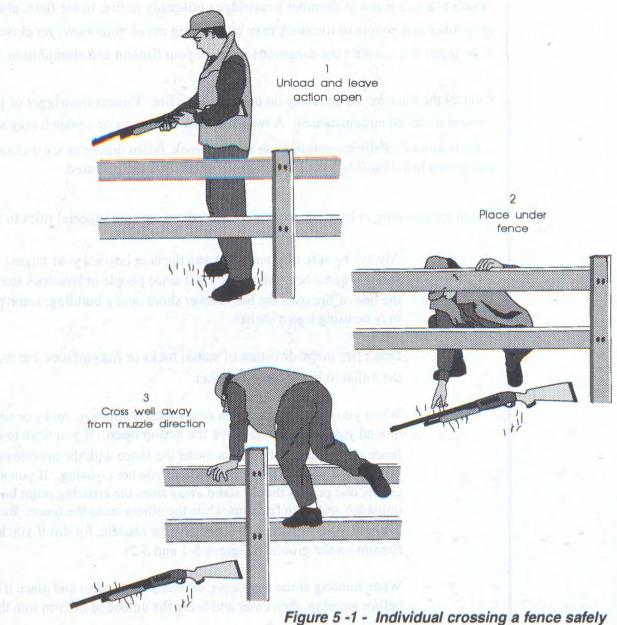
If you are shooting or hunting in open country, there are some special rules to follow.

- Always be sure of your target and the area beyond your target. Don't shoot at game near the top of a hill since people or livestock may be in the line of fire over the hill. Never shoot near a building; some person may be using it as a shelter.
- Don't fire in the direction of water, rocks or flat surfaces that may cause the bullet to break up or ricochet.
- When you cross a fence or an area which is slippery, rocky or uneven, unload your firearm and leave the action open. If you wish to cross a fence alone, place the firearm under the fence with the muzzle on the ground and pointed away from where you are crossing. If you are in a group, one person should stand away from the crossing point holding the unloaded and open firearms while the others cross the fence. Remember to check your firearm, and especially the muzzle, for dirt if you lay your firearm on the ground. (Figures 5-1 and 5-2)
- When hunting alone from a pit, unload your firearm and place it outside before entering, then enter and bring the unloaded firearm into the pit after you.

• Use binoculars if you need to see something more clearly. Never use a scope sight as a substitute for binoculars.



Put a piece of tape or a small balloon over the end of the barrel to stop twigs, dirt or snow from getting into your firearm. Make sure that it is intact and does not interfere with shooting.



SECTION 5 SAFE HANDLING AND CARRYING OF FIREARMS

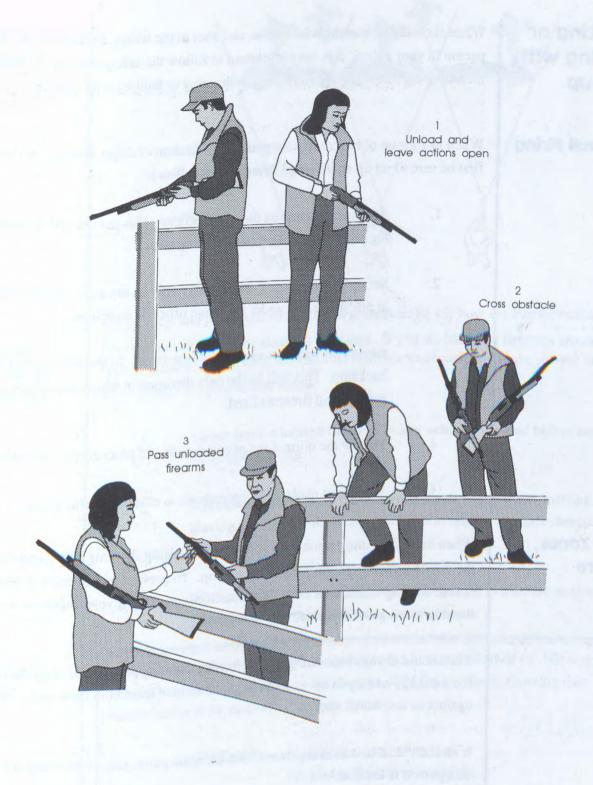


Figure 5 - 2 - Group crossing a fence safely

Shooting or Hunting with a Group

When shooting or hunting with others, any shot in the wrong direction might hit another person in your group. It is very important to follow the safety rules in this handbook, including the following special rules for shooting or hunting with a group.

Informal Firing Line

When in a group of two or more sighting-in a firearm or target shooting in the field, first be sure to set up an informal firing line as follows:

- 1. Appoint someone as the range officer. This person will be responsible for supervising all of the following steps.
- 2. Set up a firing line. Firearms may only be uncased, handled and loaded at this firing line under the range officer's direction.
- 3. Decide on which direction is down-range. Make sure there is a safe backstop. This will be the only direction in which muzzles can be pointed and firearms fired.
- 4. Follow the normal range commands and procedures. (See page 5-8)
- 5. Be sure to explain the procedures to everyone in the group.

Safe Zones of Fire

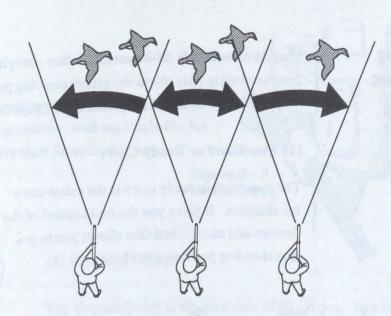
When more than one person is hunting or is practising shooting clay targets, any shot in the wrong direction might hit another person. To prevent this, everybody should agree before starting which area each shooter will cover. This is very important with groups hunting small game or shooting clay targets.

You should always know exactly where your shooting partners are, especially as positions change when you advance through the field. Guard both them and yourself against an accidental shot.

If an individual becomes separated from the main party, stop all shooting activity until that person is located.

SECTION 5 SAFE HANDLING AND CARRYING OF FIREARMS

Figure 5 - 3
Safe shooting
zones



Safe Handling Of Firearms in Vehicles

Check local and provincial or territorial authorities to see how the transportation of firearms in vehicles is regulated in your area. If you are handling firearms around any type of vehicle - boats, cars, recreational vehicles, snowmobiles, sleds, private aircraft, etc. - follow the procedures below.

- Never have a loaded firearm in any vehicle. Unload before entry.
 Load after leaving.
- 2. It is especially difficult to control muzzle direction when entering or leaving vehicles. Take extra care to point muzzle in a safe direction at such times.
- 3. When a firearm is in a vehicle, it must be placed in a secure position where it will not be dislodged or stepped upon.

Example of Accident

A duck hunter placed his loaded shotgun into his boat and climbed in. His dog then jumped into the boat, landing on the shotgun. The firearm fired, shooting the hunter fatally in the stomach.

CAUSES:

- (1) unsafe muzzle direction,
- (2) loaded firearm in a vehicle,
- (3) firearm in an insecure position.

Carrying Positions

Muzzle direction is all-important when carrying firearms. You can control muzzle direction safely only if you use proper carrying positions. When carrying firearms, you must always be aware of the possibility of slips or falls.

(1) Two-Hand or Ready Carry

The two-hand or ready carry is the safest carry for shooters. It gives you the best control of the firearm and muzzle and also allows you to get into shooting position quickly.

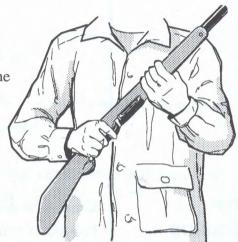


Figure 5 - 4 - The ready carry



The cradle carry is a safe carry when shooting alone. However, because the muzzle points to one side, do not use this method when walking beside anyone.

Figure 5 - 5 - The cradle carry

(3) Elbow or Side Carry

The elbow or side carry is safe when walking in open terrain. However, do not use the side carry when walking through bush, because branches can get tangled around the firearm and push the barrel downward. Do not use the side carry when others are ahead of you.



Figure 5 - 6
The elbow or side carry (action open)

SECTION 5 SAFE HANDLING AND CARRYING OF FIREARMS

(4) Trail Carry

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The trail carry is safe when several people are walking abreast. It is also safe for the leader when people are walking single file but others in the line should not carry their firearms this way.



Figure 5 - 8 The shoulder carry

(5) Shoulder Carry

The shoulder carry is the least safe of all carries. In a fall there is poor muzzle control. It must not be used for loaded guns. The shoulder carry is safe when alone or when walking beside someone. Special care must be taken to keep the muzzle pointed upward. Do not use this carry when others are walking behind you.

Figure 5 - 7
The trail carry

(6) Sling Carry

The sling carry leaves both the hunter's hands free. However, do not use this carry when walking in dense bush, because your firearm may get caught in brush and be pulled off your shoulder. Also, twigs and other debris may fall into the upright barrel. If the hunter bends sharply forwards, this carry is dangerous to those in front.



Figure 5 - 9 - The sling carry

Whatever carry you use will depend on where your companions are and the kind of terrain you are in. Never use a carry that will cause the muzzle to be pointed at another person.

Safety Procedures at the Range

Range Safety Rules

Every range has rules of safe behaviour. These may vary but will include the standard ones shown below.

- 1. Muzzle direction is always down range only.
- 2. The action of any firearm must be open at all times except when actually being used on the range.
- 3. Firearms must be handled ONLY at the firing line.
- 4. No firearm is loaded until the command to load is given by the range officer.
- 5. Fingers must be kept out of the trigger guard and off the trigger until the shooter is in position to fire.
- 6. Upon the command "cease fire," all firing stops **at once**, firearms are unloaded, actions are opened and firearms laid on the mat or on the table, muzzle pointing in a safe direction down range.
- 7. During a cease fire, no-one will handle firearms, ammunition or equipment. Persons not engaged in changing targets down range should stand well behind the cease fire line. (See Figure 5-10)

In addition to the above rules, below are several others we recommend you follow:

- All ammunition should be under the control of the club when dealing with juniors. Check with your club for any ammunition restrictions.
- Firearms should be checked by the range officer on the cease fire to be sure all actions are opened and no shells are in the breech.

SECTION 5 SAFE HANDLING AND CARRYING OF FIREARMS

- Unloaded firearms not in use are to be placed in the rack or kept in a
 case. They should be moved with the muzzle up or cased at the firing
 line.
- 4. At no time should horse play, careless handling of firearms or any other distracting activity be permitted while shooting is in progress.
- 5. Make sure you are using the correct ammunition for your firearm.
- 6. Never shoot intentionally at target holders or other range gear.

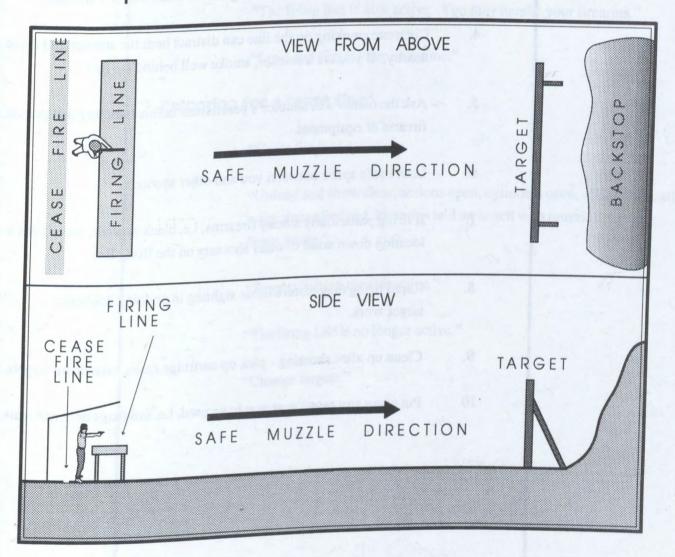


Figure 5 - 10 - Range Layout

Range Etiquette

As well as the range safety rules, there are certain standards of range etiquette followed by shooters who are considerate of others. Some of these standards are listed below.

- 1. Rules and procedures vary between ranges. Check local rules before beginning and obey those rules. There should be a safety briefing before starting.
- 2. Sign in to the firing range upon arrival.
- 3. Avoid interrupting or distracting others when they are shooting.
- 4. Cigarette smoking on the line can distract both the smoker and those nearby. If you are a smoker, smoke well behind the line.
- 5. Ask the owner's or shooter's permission before handling that person's firearm or equipment.
- 6. Leave safe space between you and other shooters.
- 7. If firing particularly smoky firearms, i.e. black powder, shoot from a location down wind of other shooters on the firing line.
- 8. Rapid firing may disturb those sighting in or doing deliberate target work.
- 9. Clean up after shooting pick up cartridge cases, take down targets.
- 10. Put away any range gear you have used, i.e. sandbags or bench rests.

SECTION 5 SAFE HANDLING AND CARRYING OF FIREARMS

Common Range Commands

The following are examples of typical range commands you may hear. Be sure you understand and obey the commands. If you are unsure, ask the Range Officer or a club/association official before you go to the range.

1. Preparing to shoot:

"Is the range clear?"

"The range is clear."

"The firing line is now active. You may handle your firearms."

"Load and fire at your own time."

2. Preparing for a cease fire:

"Cease fire."

"Unload and show clear, actions open, cylinders open, slides back, all magazines removed. Firearms laid on bench with muzzles pointing down range."

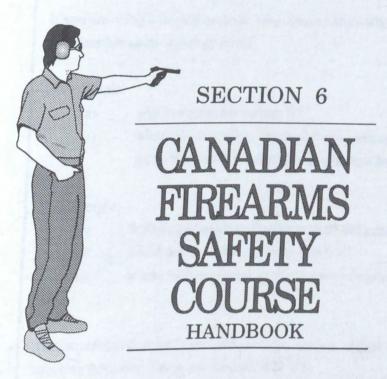
"Step back from the firing line."

"The firing line is no longer active."

"Change targets."



Section 5 - 12 January, 1994



FIRING TECHNIQUES AND PROCEDURES

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SECTION 6

CANADIAN EMBERNAS COURSES

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Marksmanship

Marksmanship is the ability to hit your mark or target. Good marksmanship is important for safe shooting. When you can shoot accurately, you will not need to spend time thinking about how to aim and shoot. Instead, you will have time to think: Is this shot safe? Is the path to and beyond the target clear?

Anticipation

If you are using a firearm to hunt, you must continually anticipate possible situations and possible shots that may occur.

For example:

- a) will game appear suddenly?
- b) where are the others in my shooting group? Also, always carefully judge the possible results of **every** shot **before** firing.

For example:

- a) is there a chance the bullet will be deflected by a tree or a rock or water?
- b) could someone be just over that hill?
- c) where will the bullet go if it passes completely through the target?

Marksmanship depends on breath control, aiming, trigger control, follow-through and shooting position. These are discussed below.

Breath Control

You need to control your breathing in order to shoot accurately with a rifle or handgun. Your gun barrel will waver unless you control your breathing at the exact moment you fire.

When you are in shooting position, take a few deep breaths, exhale a portion of the last one, and hold your breath while you aim and squeeze the trigger. This will help you to hold the barrel and sights on the target.

If you hold your breath too long (more than about 8 seconds), you may lose your breath control and miss the target. If you run out of breath before firing, take another breath and re-aim.

Aiming

Aiming Rifles and Handguns

Use your "master eye" for sighting. It is the stronger of your two eyes and will judge speed, range and focus more accurately.

To find out which is your master eye, point your finger at a distant object with both eyes open. First close one eye and then the other. Your finger will remain lined up with the object when your master eye is open. Always try to aim with both eyes open as this gives a better view of the area surrounding the target.

You must also learn to correctly use your gun sights if your aim is to be accurate. When you aim any sight at a target, this creates a "sight picture." Open sights require you to physically line both rear and front sights with the target. This process is called "sight alignment." (Figure 6-1)

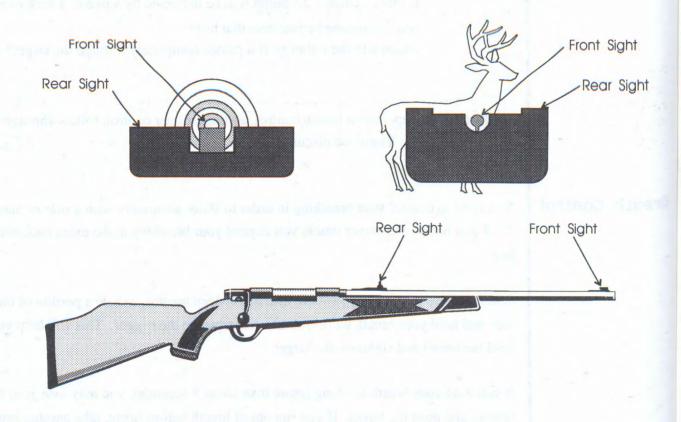


Figure 6 - 1 - Open sights aligned on a target

Scope sights do not require conscious alignment. Scope sights also have the advantage of magnifying your view of the target. (Figure 6-2)

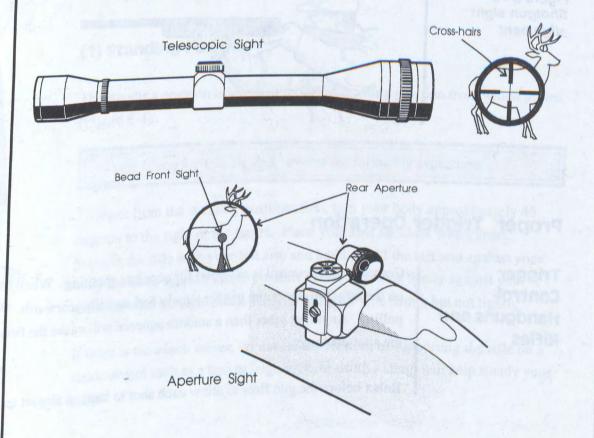
When preparing to aim through a scope sight, do not look away from the target and then try to find the target again by looking through the scope. Instead, while watching the target steadily, mount the gun correctly to your shoulder pointing toward the target area until the scope comes up naturally between your eye and the target. Keep your eye well clear of the sight when firing.



Scope sights have a very narrow field of view, so you might not see a person or object coming into the path of your shot.

Never use a scope as a substitute for binoculars to identify persons, animals or objects.

Figure 6 - 2 Aperture and scope sights aligned on a target



Aiming Shotguns

Aiming a shotgun is different from aiming other firearms. With a handgun or rifle, you must aim precisely. With a shotgun you point at the target. When a shotgun is fired, the shot pellets spread out after leaving the barrel and hit a larger area than a single bullet. Therefore, precise aiming is not as necessary as with a handgun or rifle.

If you are using the average shotgun, keep both eyes open. Focus on the moving target, not on the gun barrel or the bead sight. While watching the target, mount the gun correctly to your shoulder and point it toward the target area. Be sure to place the stock against your cheek first, then against your shoulder. This positions the gun in exactly the same position each time you shoot. (Figure 6-3)

Some shotguns are equipped with adjustable sights and are primarily used to fire slugs. These types use the same techniques required for accurate rifle shooting.

Figure 6 - 3 Shotgun sight alignment





Proper Trigger Operation

Trigger Control-Handguns and Rifles

Correct trigger control is essential for accurate shooting. When the sights are aligned on the target, squeeze the trigger slowly and steadily rearwards. Avoid yanking or pulling. Anything other than a smooth squeeze will cause the firearm to waver and send the shot off target.

Relax before the gun fires to allow each shot to happen almost as a "surprise".

Trigger Control - Shotguns

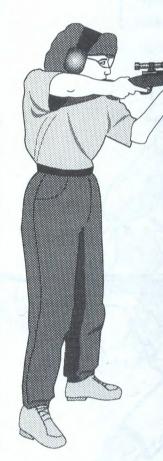
Shotgun triggers are tapped instead of squeezed. The trigger tap is similar to the action of striking a typewriter key. Tap the trigger quickly, but not hard.

Follow-Through

Follow-through simply means to keep holding your firing position after the gun has been fired. If you do not, it is more likely that your aim will be off target. Follow-through helps make sure that the bullet leaves the barrel before the gun moves.

Shooting Positions

Shooting Positions - Rifles



(1) Standing Position

The standing position is the most unstable shooting position from which to fire. (Figure 6-4)

If you are left-handed, reverse the following procedure.

To shoot from the standing position, first, turn your body approximately 45 degrees to the right of the target. Place your feet shoulder width apart. Support the rifle with your left arm and hand. Hold the left arm against your body for extra support where possible. Hold the stock firmly against your shoulder with the right hand. Keep holding the rifle firmly but not tightly.

If there is too much waver, do not shoot. Resting or supporting the rifle on a stable object such as a tree or large rock, or using a sling, will help steady your shot.

Figure 6 - 4 Correct standing Position

(2) Kneeling Position

This position is better than the standing position but not as steady as either the prone or sitting positions. (Figure 6-5)

Turn to about a 45 degree angle to the target. Kneel on your right knee and place your left foot slightly forward. Sit on the heel or the side of the right foot. Place the left elbow near but not on the bony part of the left knee, as far under the rifle as you can.

If you are left-handed, kneel on the left knee with the right foot forward.

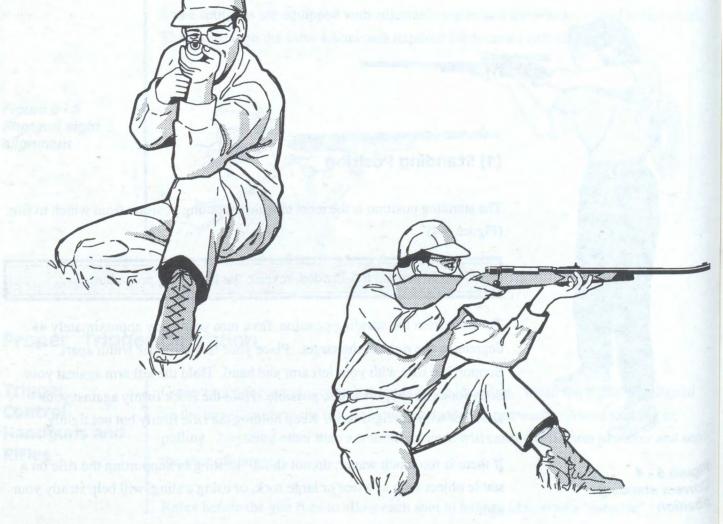


Figure 6 - 5 - Correct kneeling position

(3) Sitting Position

The sitting position is one of the steadiest shooting positions. (Figure 6-6)

Sit solidly on the ground, with your legs crossed or open, and your body positioned about 30 degrees to the right of the line of aim.

Place your left elbow near but not on the bony part of the left knee. Tuck the elbow as far under the rifle as possible. Place the right elbow on or near the right knee.

Reverse the procedure if left-handed.

Hold the rifle firmly but do not grip it tightly. If bracing your body against a tree or rock to steady your aim, be careful that the recoil will not force you against the support.



Figure 6 - 6 - Correct sitting position

(4) Prone Position

The prone position is the steadiest shooting position. It is good for firing accurate long distance shots if tall grass or dense brush does not obscure the line of sight to the target. (Figure 6-7)

If right-handed, lie on your stomach with your body angled slightly to the left of the line of aim. If you are left-handed, reverse the position. Keep your back straight and legs in a relaxed position. The right leg should be bent slightly. Both elbows should be bent and your shoulders curved slightly forward to form a solid upper body position. The upper body and arms support the rifle weight.

When shooting, you can use a rifle sling for extra support. Hold the rifle grip with the trigger hand. Place your opposite arm through the sling as far as it will go. Swing your arm in an outward circular motion, ending with your hand under the fore end of the rifle and the sling across the back of your hand.

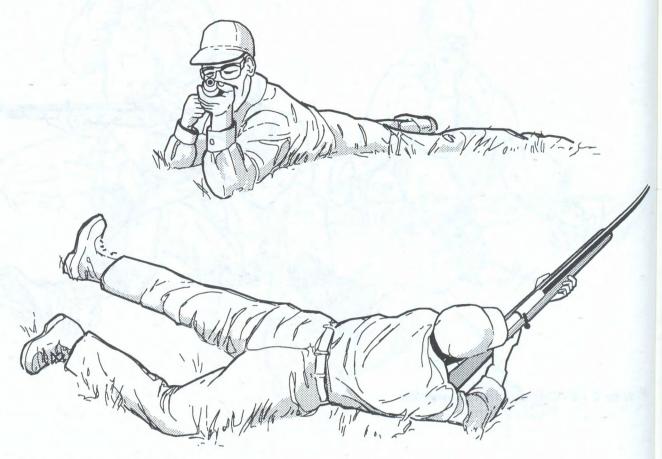


Figure 6 - 7 - Correct prone position

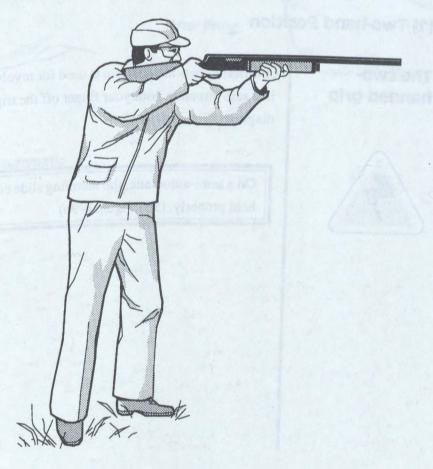
Shooting Positions -Shotguns

Shooting a shotgun is different from shooting a rifle. With a rifle you aim precisely. With a shotgun you point at the target. (Some shotguns are equipped with adjustable sights and are primarily used to fire slugs. These types use the same techniques required for accurate rifle shooting.) (Figure 6-8)

Accurate shotgun shooting requires you to make a fast but smooth series of movements of the eyes, body and gun. To achieve this, stand like a boxer: feet spread apart, well balanced, arms and body free to swing right or left. This position allows rapid movement.

When firing, shift your body weight to the leading leg (left leg if you shoot right-handed, and vice versa). The leading hand holds the shotgun fore-end and points naturally to the target area. Aim the shotgun by pointing it at the target and "tapping" the trigger instead of squeezing it. With moving targets, continue to move the barrel with them as and after you fire. Otherwise, the shot will miss behind the target.

Figure 6 - 8 Correct shotgun shooting position



Shooting Positions -Handguns

In Canada, **hunting with handguns is not allowed**. However, target shooting is permitted on approved ranges.

Handgun shooting also requires proper grip, position, sight alignment, trigger squeeze and breath control. The correct firm grip gives you complete control of your handgun when it fires. Changing your grip will affect sight alignment and bullet placement.

You can fire handguns either two-handed or one-handed and from several positions. Only the basic standing positions are described below.



If the thumb of the weak hand is in the wrong position while firing some semiautomatic handguns with both hands, it can be injured by the recoiling slide.

(1) Two-hand Position

The twohanded grip



A different two-handed grip is used for revolvers and semi-automatics. Point the muzzle in a safe direction with your finger off the trigger. Grip the gun as shown in the diagram. (Figure 6-9a,b)

On a semi-automatic, the recoiling slide could injure your hand if the firearm is not held properly. (See Figure 6-9b)

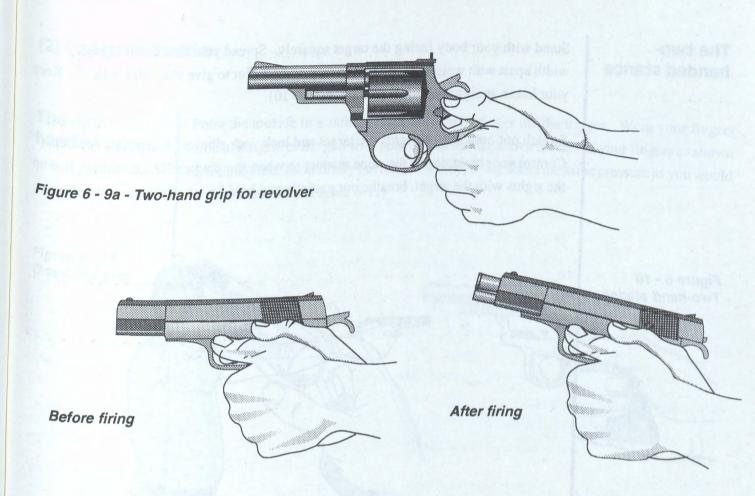


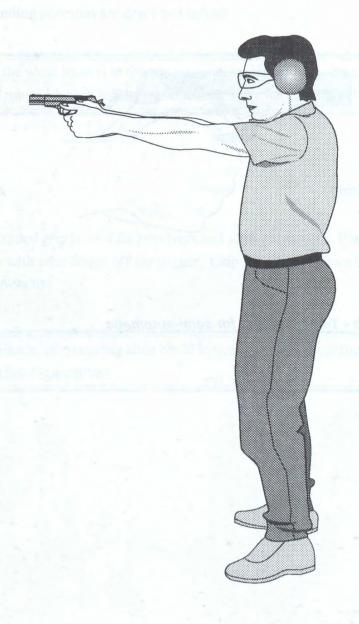
Figure 6 - 9b - Two-hand grip for semi-automatic

The twohanded stance

Stand with your body facing the target squarely. Spread your feet about shoulder width apart with weight distributed evenly on both feet to give you solid balance. Keep your knees straight but not locked. (Figure 6-10)

Stretch out both arms towards the target and lock your elbows. Keep your head up. Control your breathing in the same manner as when shooting a rifle. i.e.- inhale, line up the sights with the target, breathe out partially and hold breath while squeezing trigger.

Figure 6 - 10 Two-hand stance

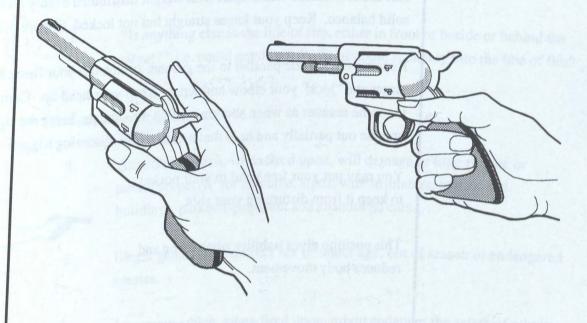


(2) One-Hand Position

The onehanded grip

Point the muzzle in a safe direction with your finger off the trigger. Wrap your fingers around the grip of the gun with your thumb resting above the tips of your fingers as shown in the diagram. Hold firmly but not too tightly, using about the same pressure as you would to hold a hammer. (Figure 6-11)

Figure 6 - 11 One-hand grip



The onehanded stance



Hold firearm firmly when firing with one hand or it may be jarred loose.

Stand with your body turned approximately 45 degrees from the target. Spread your feet about shoulder-width apart with weight distributed evenly on both feet to give you solid balance. Keep your knees straight but not locked. (Figure 6-12)

Keeping the muzzle parallel to the ground, stretch out your firing arm towards the target and "lock" your elbow and wrist. Keep your head up. Control your breathing in the same manner as when shooting a rifle. i.e.- inhale, bring the sights up to the target, breathe out partially and hold that breath while squeezing trigger.

You may put your free hand in your pocket to keep it from disturbing your shot.

This position gives stability when firing and reduces body movement.

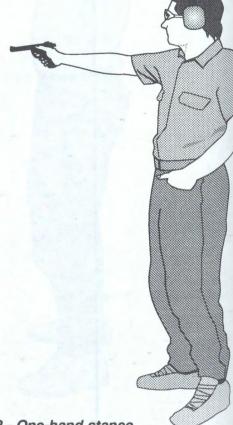


Figure 6 - 12 - One-hand stance

Targets

Safe Targets

Before firing at any target, verify the target by asking yourself the following:

- 1. "Am I sure of the identity of my target?" i.e. can I see it absolutely clearly? am I positive it is exactly the target I want?
- 2. "Is it a permitted target?" i.e. is it legal game, the proper target at a range, not on a hilltop or across a road.
- 3. "Is anything else in the line of fire, either in front or beside or behind the target?" i.e. could anything else be or come suddenly into the line of fire?

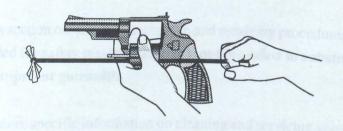
Unacceptable Targets

An unacceptable target is:

- 1. Any target which, when fired upon, will damage or litter private or public property; for example, signs, wire insulators, bottles, old buildings, parked equipment and abandoned cars.
- 2. Illegal game: i.e. incorrect sex or under age, out of season or endangered species.
- 3. Any target which, when fired upon, might endanger the safety of others: for example, shooting near inhabited areas, across or along roads, over hills, at water or hard surfaces and at possibly explosive objects.
- 4. Any target which, when fired upon, may disturb others; for example, discharging firearms early in the morning or near farmhouses.
- 5. Any target of a material or shape that can cause ricochets.



January, 1994



SECTION 7

CANADIAN FIREARMS SAFETY COURSE

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Firearm Care

An improperly functioning firearm is an unsafe firearm. Always be sure your firearm is functioning safely.

This section on minor maintenance and servicing procedures for your firearm is included for safety reasons only. It is not intended to substitute for regular service by a competent gunsmith.

For more specific information on cleaning and servicing your firearm, consult your firearm owner's manual or a gun shop or gunsmith. Accidents can occur if these procedures are not performed correctly.

Firearms are precision instruments. Firearms which are not operating properly should be repaired only by a gunsmith or returned to the manufacturer. Even minor repairs should be made by a qualified expert. Unqualified persons or inexperienced shooters should never attempt to repair any firearm.

Firearm Servicing

The average user should limit servicing activities to the cleaning and lubrication of his or her firearms. Every firearm should still be checked regularly by a gunsmith.

Restricted firearms require a separate permit for transporting them to a gunsmith or gun shop. A Permit to Carry a restricted firearm to a range does not allow you to take that firearm for repair.

Example of Accident

While attempting to clean an old revolver, the person dropped the firearm. The revolver fired when it struck the floor, killing someone in the next room.

CAUSES:

- (1) having a loaded firearm in a house,
- (2) lack of muzzle control, and
- (3) failing to check if the firearm was unloaded.

Firearm Cleaning

Information on cleaning firearms safely should be obtained from your firearm owner's manual. Accidents can occur if the cleaning procedure is not performed correctly.

Modern smokeless primers and powders are non-corrosive, but some older military ammunition still contains corrosive chemicals. If you use this type of ammunition, the firearm should be cleaned immediately after use.

The other major threats to firearm safety are rust caused by moisture and condensation, and excessive build-up of residue in the firearms. This is why regular cleaning is recommended.

The barrel of a firearm should be cleaned after every use. This will protect its finish and help keep it in good working order. Any firearm which has been stored for a long time or has been exposed to moisture or dirt also must be cleaned thoroughly **before** use. For instructions on cleaning the remainder of the firearm, consult your owner's manual.



If excess oil or moisture is present in a firearm, safeties and other parts of the firing mechanism may freeze in a firing position during cold weather. Later, when the firearm thaws, it may fire.



Before cleaning a firearm, remember the rules for home safety with firearms:

- never pick up a firearm without immediately pointing the muzzle in a safe direction;
- 2. keep your finger off the trigger;
- 3. always check to see that both the chamber and the magazine are empty;
- 4. never allow a loaded firearm in any building or living area; and,
- 5. always give cleaning your firearm your full attention. Never clean a firearm while doing something else, like watching television.

Cleaning Materials

To clean a firearm properly, you need the following materials:

- 1. a cleaning rod and attachments (be sure to use the right size for the firearm), such as
 - a bore brush, and
 - tips to hold cloth patches;
- 2. patches;
- 3. powder solvent (also called 'bore cleaner');
- 4. light gun oil; and
- 5. a soft cloth.

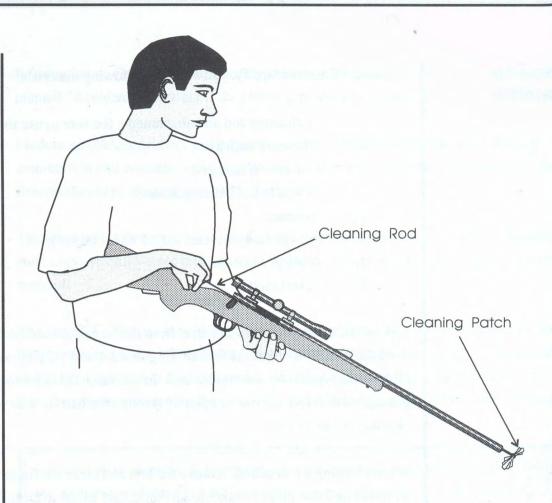
If possible, clean your firearm barrel from the breech towards the muzzle, rather than from the muzzle towards the breech. (Figures 7-1 and 7-2) However, you may have to clean some types from the muzzle end. In this case, first lock the breech open to permit passage of the cleaning rod completely through the barrel. You will find a pull-through cleaning device helpful.

When cleaning a bolt action, remove the bolt and clean the firearm from the breech end. You will find that hinge or take-down models are easier to clean if you first remove the barrel.



Before starting to clean a firearm, be sure it is unloaded and the action is open. Make sure no ammunition is nearby during cleaning.

Figure 7 - 1
Properly cleaning
a rifle barrel from
the breech to the
muzzle



Cleaning Procedure

- 1. Attach the bore brush to the cleaning rod and apply bore cleaner to the brush.
- 2. Run the brush through the bore of the firearm barrel 8 to 10 times. Be sure that the brush sticks out from the barrel completely before drawing it back through the barrel.
- 3. Remove the bore brush from the cleaning rod and attach a patch-holder tip and a proper size cloth patch. Dip the cloth patch in bore cleaner and run it through the bore several times. Remove the cloth patch from the rod tip.
- 4. Next, run a clean, dry patch through the bore several times.
- 5. If the patch comes out dirty, repeat Steps 1 through 4 above.
- 6. Next, run a lightly oiled patch through the bore. Use only light gun oil.
- 7. If cleaning a revolver, repeat Steps 1 through 6 above for each of the chambers of the cylinder. (Figure 7-2) Be sure that dirt, powder particles, and other debris are not left under the extractor. Also clean the front face of the cylinder.

SECTION 7 CARE OF FIREARMS

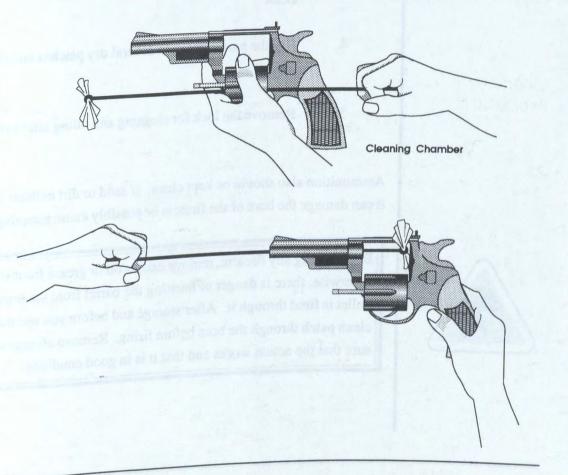
8. Wipe the outside of the firearm with a clean cloth and a light coat of gun oil. You may wish to turn your firearm muzzle down on a clean cloth for a while to let any excess oil you may have missed drip down the barrel onto the cloth. In this case, make sure you keep an eye on the firearm at all times or store it away securely.

After cleaning, it is better to place the firearm in a position that prevents oil in the bore from gradually seeping into the action, as this might happen if the firearm is placed upright on its butt.

Before the next firing of the firearm, run a dry patch through the barrel to remove any excess oil.

After any firearm has been cleaned for storage, avoid any skin contact with metal parts. Acids in perspiration can cause rust.

Figure 7 - 2 Cleaning a revolver



Cleaning a Muzzle-Loader

Black powder is very corrosive and also attracts moisture causing rust, so a black powder gun should be cleaned after every firing session.

Use either commercial black powder cleaning solvent or hot, soapy water. You will also need a ramrod with a cleaning patch attached. Use a rod as close to bore diameter as possible. A notch cut 2 1/2 centimetres (about 1 inch) from the end of the rod will prevent the cleaning patch from coming off in the barrel. Use wet patches to soften the dried powder.

- 1. Detach the barrel and place the lock end in a container of soapy water.
- 2. Insert the ramrod with a patch attached into the barrel. Pump the ram rod up and down until water flows from the top end of the barrel.
- 3. Repeat, changing the water as it becomes dirty, until the water stays clean.
- 4. Dry the barrel out with several dry patches and oil thoroughly with good gun oil.
- 5. Remove the lock for cleaning and oiling after every use.

Ammunition also should be kept clean. If sand or dirt collects in the cartridge or shell, it can damage the bore of the firearm or possibly cause jamming of the action.



Before using any firearm, remove excess oil or grease from the inside of the barrel; otherwise, there is danger of bursting the barrel from the pressure generated when a bullet is fired through it. After storage and before you use the firearm again, run a clean patch through the bore before firing. Remove all excess grease and oil. Make sure that the action works and that it is in good condition.





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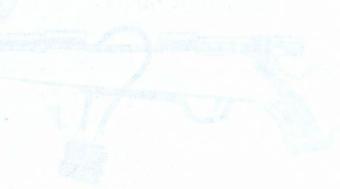
SECTION 8

CANADIAN FIREARMS SAFETY COURSE

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Intentional Firearms-related Deaths and Injuries

The thought of firearms being misused to cause intentional death or injury to other human beings is extremely distasteful to firearms owners. However, because it is a fact of life that influences the laws concerning possession and storage of firearms, intentional misuse must be acknowledged and discussed.

As is the case with many other mechanical devices around the home such as automobiles, power tools and kitchen knives, firearms can become lethal weapons in the wrong hands or when available at the wrong time or place. Unfortunately, by their very nature, firearms are more deadly than these other devices when misused or abused. Most firearms owners are not familiar with the statistics or studies concerning intentional misuse, so these are discussed briefly below.

Suicide

Statistics show that the great majority of firearms-related deaths and injuries in Canada are suicides. The main thing to remember about suicide is that in many cases it is an act of sudden impulse brought on by some temporary set-back that seems like a major tragedy to the person at that moment in time. These can be occurrences that seem trivial to the outside observer such as a failed exam, an argument with a boy or girl friend, an accident with the family car, etc. So the main line of defence against this type of suicide is the prevention or at least extended delay in the access to weapons.

Many of us might think that very little can be done to prevent suicides because the person involved can always use another method if a gun is not available. However, studies show that this is not so. If the "weapon of choice" is not available right away, many potential suicides give up the idea permanently. Even if another weapon is used, it often is not as lethal as a firearm. If the person survives the first suicide attempt, they do not necessarily try again. In fact, by a few weeks after a failed suicide attempt, many survivors are pleased they were unsuccessful. But because a firearm is so deadly, the suicidal person often does not get a second chance.

Homicide

Homicides, the intentional killing of another human being, are the second highest cause of firearms-related deaths in Canada. As with suicides, there are common misperceptions about intentional firearms killings. One is that most homicides are carried out by criminals and there is nothing the average firearms user can do to prevent them. In actuality, most homicides are carried out by apparently "normal" people with no criminal record while in a temporary rage and acting under impulse. Generally, the victim is a spouse, relative or friend of the killer. Often, alcohol or drug abuse is also involved. In such circumstances, if a firearm is readily available, it is used. If no firearm is available, some other weapon such as a fist, a club or a knife may be substituted in the heat of the moment. However, the chances of killing with these other weapons are far lower than with a firearm.

To sum up, many suicides and homicides are acts of sudden and temporary impulse. The majority of these acts are carried out by ordinary people in their own homes while under the influence of great strain.

What can the average gun owner do about all of this? Well, impulse and availability of firearms and ammunition are two key factors in both suicides and homicides. If easy availability is removed, the impulse to violence often dissipates in a few minutes or hours. In other words, be sure your firearms and ammunition are out of sight and difficult to get at by storing them locked separately and securely.

Armed Robbery

Many of the firearms used in armed robberies have been stolen from the homes of their legal owners. In fact, a frequent reason for burglaries is to obtain firearms.

To reduce the risk of your firearms being stolen and misused for criminal purposes:

- > keep your firearms stored securely;
- **>>** do not let it become widely known that you possess firearms.

SECTION 8 RESPONSIBILITIES OF THE FIREARMS OWNER/USER

Social Responsibilities and Ethics

As a firearms user, you have certain legal obligations to the community at large. However, in some cases, it is not enough merely to adhere to the letter of the law. Instead, you should follow the spirit of the law and put the welfare and well being of your fellow citizens foremost. Following are some moral and social rules which should be part of the code of ethics for anyone in possession of firearms.

Store all firearms and ammunition securely

As discussed earlier in Section 2 and above, firearms can be misused intentionally by certain individuals in a state of depression or violent anger. Keep your firearms and ammunition out of easy access by storing them separated, disabled and locked away. This may cause you some inconvenience, but if it saves a person from serious injury or death, it will be worth it.

Explain firearms safety to all members of Your household

Everyone in a home where firearms are kept should know the safety rules. Just as you would point out the hazards of dangerous tools, substances or poisons kept in the home to your children, explain the potential dangers of improper use or handling of firearms and ammunition.

Remove firearms from situations of potential violence

You may become aware of a situation where violence or tragedy might occur. In such cases, it is wiser to go beyond legal safe storage of firearms and completely remove any that may be present. If this is not possible, at least notify the police of the situation.

Act sensibly and carefully while around firearms

Always pay close attention to what you are doing, and to what others around you are doing. See to it that everyone is acting safely and responsibly.

Always stay fully alert when around firearms

Never consume alcoholic beverages or illicit drugs when around firearms, and do not go shooting with anyone who has. These can affect your mental or physical reactions. Even non-prescription drugs, such as allergy medicine, can affect your alertness, your senses and your balance.

Always get permission before shooting on others' property Whether the land belongs to the crown, a local club or is privately owned, make sure you are welcome and permitted to shoot there, and that you can shoot there safely: for example, someone else may be shooting there at the same time.

Have your eyesight checked regularly

This is especially important for colour blindness. Shooting requires good vision for target identification and accuracy.

Have your firearm checked periodically by a gunsmith

Always have a qualified person examine any firearm which is not operating properly.

Avoid firing near any buildings or roads

Respect the rights of others to safe travel and undisturbed use of their property.

Know and respect firearms regulations and local by-laws Some of these are listed in Legal Responsibilities.

Wear safety equipment

Encourage others to do the same.

	SOCIAL RESPONSIBILITIES OF A FIREARMS USER	
1.	Store all firearms and ammunition securely.	
2.	Explain firearms safety to all members of your household.	
3.	Remove firearms from situations of potential violence.	
4.	Act sensibly around firearms.	
5.	Alcohol or drugs don't mix with firearms.	
6.	Get permission before shooting on anyone else's property.	
7.	Have your eyesight checked periodically.	
8.	Have your firearm checked periodically by a gunsmith.	
9.	Never fire near any buildings or roads.	
10.	Know and respect firearms regulations and local by-laws.	
11.	Wear safety equipment when shooting.	

Chart 15 - Social responsibilities of a firearms user

Legal Responsibilities

As a firearm owner and user, you have legal as well as social responsibilities. These responsibilities extend to federal, provincial and municipal laws and regulations. The following examples in the chart below describe a few of the legal responsibilities that may affect you at the municipal, provincial and federal levels:

Government Level	Example of law or regulation	
Municipal/County/Local (e.g. Noise, Nuisance, Zoning)	Some municipalities or counties may not allow firing of a firearm under any circumstances within its boundaries. Some will regulate firing times and/or closeness to dwellings.	
Provincial (e.g. Game, Fish, and Wildlife Acts)	Some provinces require anyone who hunts with a firearm to wear blaze orange clothing. Some restrict shooting across or within a certain distance of roads.	
Provincial	Some provincial laws may limit your use of motorized vehicles in hunting or shooting.	
Federal (e.g. Gun Control Laws and Regulations, National Parks Act, Explosives Act)	If you are the registered owner of a restricted firearm, you must notify the local registrar of firearms if you intend to move to a new address. You must also obtain the proper permit to move your restricted firearm to that new address.	
Federal	You must make sure that the person who buys, borrows, or otherwise acquires your firearm has a valid FAC and other permits.	

Chart 16 - Some legal responsibilities of a firearms user

SECTION 8 RESPONSIBILITIES OF THE FIREARMS OWNER/USER

Other Duties of Firearm Owners and Users

An automobile driver is expected to know the rules of the road and any driving-related laws and regulations. In the same way, a firearm owner/user is responsible to keep informed about any laws or regulations about firearms and ammunition. But you may wish to go even beyond what is regulated to further increase safety. Some suggestions are listed below.

- Keep an inventory of your firearms, plus any supporting documents such as photographs and owner's manuals in a safe place. This will help you describe your firearms should they be stolen or lost. It will also make it easier for you to find your owner's manual and records of servicing or repair.
- Keep informed. Changes may occur in laws and regulations from time to time, whether at the municipal, provincial/territorial, or federal level.
- Avoid telling others about the firearms in your home. You may be inviting theft.

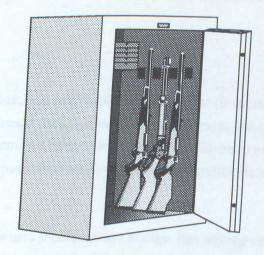
Many legal provisions which apply to firearm owners and users can lead to prosecution if ignored. Most of these provisions are common sense, but if you are in any doubt or require more information, contact your local police, the appropriate local authorities, or obtain a copy of the federal legislation and regulations from your Chief Provincial or Territorial Firearms Officer.

You can get information about provincial and municipal laws and regulations from your local police office.

Not all firearms laws can be included in this handbook and you may have to contact other appropriate government departments and agencies, depending on your needs. For example, if you wish to store large quantities of ammunition, contact Energy, Mines and Resources Canada for their explosives regulations; if you want to import a firearm, you should contact Canada Customs and Excise and the Department of External Affairs; for hunting regulations in your province or territory, you might contact your local fish and wildlife official or the provincial or territorial Hunter Safety Education Co-ordinator.



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SECTION 9

CANADIAN FIREARMS SAFETY COURSE

HANDBOOK

SAFE STORAGE, DISPLAY, HANDLING AND TRANSPORTATION OF FIREARMS

9 STORAGE AND TRANSPORT





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CANADIAN FIREARMS SAFEIY COURSE

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SECTION 9 STORAGE, DISPLAY, HANDLING & TRANSPORTATION OF FIREARMS

Storage and Display

Remember, you are responsible for your firearms 24 hours a day. Anyone who owns or uses a firearm must meet safe storage, handling, transportation and display requirements set by regulations under the firearms provisions of the <u>Criminal Code</u>. Genuine gun collectors have additional requirements. All of these are covered in this chapter.

Firearm owners should always assume that anyone untrained in the use of firearms will not know how to handle them properly. To prevent critical incidents or accidents that could occur from unauthorized access, always store or display firearms and ammunition securely as described below.

Storage

Remember, by law, all firearms must be kept unloaded except when actually in use as detailed in the regulations. Ammunition must either be kept separate from the firearm, or in a locked container or receptacle with the firearm.

Non-Restricted Firearms

A non-restricted firearm when stored must be:

- 1. unloaded,
 - and
- 2.(a) prevented from working either by fitting it with a secure locking device like a cable or trigger lock **or** by removing the bolt or bolt carrier, **or**
- 2.(b) kept in a securely locked container, room or receptacle.

Restricted Firearms

A restricted firearm must be stored:

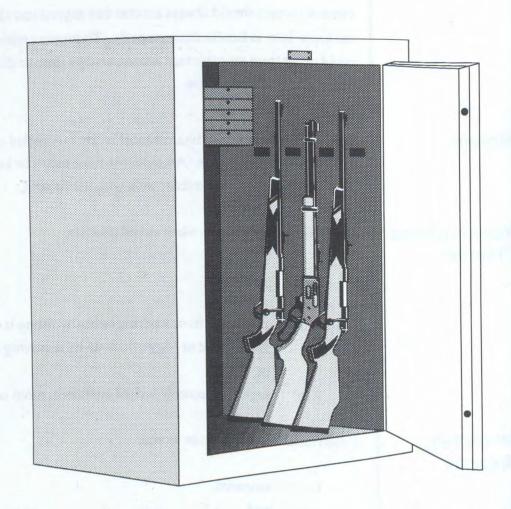
- 1. unloaded,
 - and
- 2.(a) prevented from working by fitting it with a locking device like a cable or trigger lock, and stored in a locked container, receptacle or room that cannot be easily broken open,

or

2.(b) kept in a vault, safe or room that has been specifically constructed or modified for the secure storage of firearms.

If you need to temporarily **store** a restricted firearm in a location other than that written on the registration certificate, you must get a *temporary storage permit* from a local registrar of firearms.

Figure 9 - 1 Storage vault



SECTION 9 STORAGE, DISPLAY, HANDLING & TRANSPORTATION OF FIREARMS

Display

All firearms that are displayed must be unloaded and must not be displayed with and must not be easily accessible to cartridges capable of being discharged from the firearm.

Non-Restricted Firearms

In addition to the above, non-restricted firearms must be:

 a) prevented from working by a secure locking device like a cable or trigger lock,

or

b) displayed locked in a container, receptacle or room that cannot easily be broken into.

Restricted Firearms

A restricted firearm displayed in a home, in addition to being unloaded and kept separate from its ammunition, must be:

 prevented from working by fitting it with a locking device like a cable or trigger lock,

and

b) securely attached to a non-portable structure so that neither the structure nor the firearm can be easily removed.

Restricted firearms that are displayed other than in a home, such as at a gun show, in addition to being unloaded and kept separate from their ammunition, must be:

securely attached to a non-portable structure by a chain, cable or other similar device where the structure and firearm cannot be easily removed but may be handled by a member of the public under direct supervision.

If you live in a rural area where your provincial or municipal laws allow firing a firearm, and you need reasonable access to your firearm for animal control, you may be exempted from some of the storage and transportation requirements, as long as the arrangement is temporary. Make sure to check with your local police service.



Every person who stores, displays, handles or transports any firearm in a manner contrary to a regulation made under paragraph 116(1)(g)

- (a) is guilty of an indictable offence and liable to imprisonment for a term not exceeding two years; or
- (b) is guilty of an offence punishable on summary conviction. <u>Criminal Code</u> Section 86(3).

Figure 9 - 2 - Cable and Trigger Locks



SECTION 9 STORAGE, DISPLAY, HANDLING & TRANSPORTATION OF FIREARMS

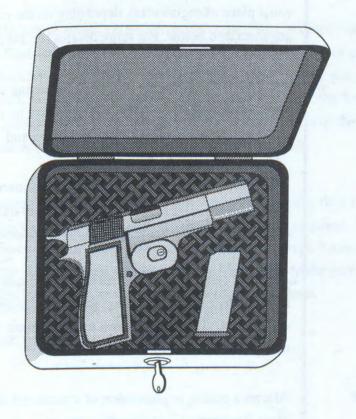
Handling and Transport

Before obtaining your first firearm, think about how you will carry it home and where you will keep it. Remember, when you leave the dealer's shop, you will be carrying your firearm in a public place. It is recommended that all firearms be carried in a case or container to avoid overt display.

All firearms **must be unloaded** when transported. You may load a firearm **only** in a place where it is lawful to discharge it. However, it is recommended that you never load a firearm until you are ready to fire. In addition, when handling any firearm, it is unlawful to point it at any person, whether that firearm is loaded or not.

Ammunition for a firearm must be kept separate, **or** must be locked securely with the firearm in a case.

Figure 9 - 3 - Case



Non-Restricted Firearms

Non-restricted firearms must always be transported unloaded. If they are left in an unattended vehicle, they must be locked in the trunk, if there is one, or kept out of sight and the vehicle locked. If the vehicle cannot be locked (e.g. snowmobiles, ATVs), the firearm must be attended by an adult.

Restricted Firearms

Restricted firearms must be unloaded, individually locked and put in a locked case when being transported. If they are left in an unattended vehicle, the case must be locked in the trunk, if there is one, or stored out of sight in the locked vehicle.

Persons wishing to transport firearms on an aircraft, should first contact the airline for information on that carrier's regulations and requirements.

Types of Permits

There are four types of permits that allow you to have a restricted firearm away from its usual place of registration, depending on the purpose for which they are required They are described below. For more details, see the <u>Criminal Code</u>.

Permit to Convey

To begin the registration process by allowing someone applying for a registration certificate to bring the firearm he or she wishes to register to the local registrar of firearms for examination and identification.

Permit to Transport

Allows a person to transport a restricted firearm from one specific place to another specific place. The permit may be issued to transport a registered firearm only for acceptable reasons, such as a change in residence, repair.

Permit to Carry

Allows a person to have a restricted firearm in a place other than the address on the registration certificate for that gun e.g. at an approved shooting club or for use in lawful occupation. The Carry Permit may be issued to a person other than the registered owner of the firearm.

Temporary Storage Permit

Allows a person in possession of a restricted firearm to bring it to and store it at anothe place for a period not exceeding one year. (i.e. for security when on vacation or during a temporary crisis situation).

SECTION 9 STORAGE, DISPLAY, HANDLING & TRANSPORTATION OF FIREARMS

Genuine Gun Collectors

A genuine gun collector is defined in the Criminal Code as a person who:

- possesses or seeks to acquire one or more restricted weapons that are related or distinguished by historical, technological or scientific characteristics;
- has knowledge of those characteristics;
- has consented to the reasonable periodic inspection of the part of the premises in which the restricted weapons are to be kept;
- has complied with other requirements prescribed by regulation respecting knowledge, secure storage and the keeping of records for restricted weapons.

These conditions do not apply to those who collect rifles and shotguns that are not restricted weapons.

Your Obligations as a Genuine Gun Collector

Essentially, collectors of restricted weapons are required to meet safe storage requirements. Restricted weapons must be kept in a secure container or room and protected by a locking device. When the restricted weapon is kept in a vault or safe or a secure room built or modified for firearms storage, a locking device for the firearm is not required. Collectors must also keep basic records that consist of the registration certificate and the application form used to obtain the certificate.

Inspections

Inspections of storage areas and records may be carried out at any time mutually agreed upon by the collector and the inspector, and advance notice is required. If no agreement can be reached, the inspection may take place between 7 a.m. and 9 p.m. Reasonable notice must be given and the inspection is limited to the part of the premises in which the collection of restricted weapons and records are kept.

For further details, consult the regulations.



GLOSSARY

Able to be reached or entered. Accessibility

An unintentional act or event, often caused by carelessness or lack of knowledge. Accident

The mechanism of a firearm by which ammunition is loaded, fired, extracted and ejected. Action

The mechanism on a firearm that unlatches or permits the opening or operation of the **Action Release**

action to obtain access to the chamber.

Any firearm manufactured before 1898 that was not designed to use rimfire or centre-fire **Antique Firearm**

> ammunition and that has not been redesigned to use such ammunition, or, if so designed or redesigned, is capable only of using rimfire or centre-fire ammunition that is not commonly available in Canada. However, antique handguns do not require registration

unless the owner intends to discharge them.

A rear sight with a hole through which the target is viewed. See also Peep sight. Aperture sight

See Semi-automatic. **Auto-loading**

A lead projectile fired by black powder firearms. Ball

The study of the motion of projectiles in the barrel and in flight (trajectory, force. **Ballistics**

impact and penetration) and the elements which affect the motion.

The metal tube of a firearm through which the bullet, shot or projectile travels when the Barrel

firearm is fired.

The distance from the muzzle of the barrel to and including the chamber. This excludes **Barrel length**

> accessories or barrel extensions such as flash suppressors or muzzle brakes. In the case of a revolver, the distance from the muzzle of the barrel to the breech end immediately in

front of the cylinder.

The paper filler at the rear of the powder charge of the shotgun shell. Base wad

BB gun

A smoothbore air gun designed to use spherical steel BB pellets. Also called Air gun or
Pellet Gun

Big bore A competitive rifle shooting term which refers to centre-fire firearms or ammunition.

Black powder A finely ground mixture of three basic ingredients—saltpetre (potassium nitrate), charcoal (carbon) and sulphur principally used in muzzle-loaders and antique cartridge firearms.

Blueing or Bluing An anti-rust process for treating metal gun parts which also colours them blue.

Boat tail The tapered rear end of some bullets, used to increase ballistic efficiency at long range.

Bolt A steel rod-like assembly which moves back and forth in a bolt action, sealing the cartridge in the chamber during firing.

Bolt face The forward end of the bolt which supports the base of the cartridge.

Bore The inside of the barrel of a firearm, from the throat to the muzzle, through which the projectiles travel.

Bore diameter The measurement from one side of the bore to the other. If a barrel is rifled, the bore diameter is measured before the grooves are forged. See Rifling.

Breech The rear end of the barrel into which the ammunition is loaded. See Chamber.

Breechblock The part in the breech mechanism that locks the action against the firing of the cartridge.

Breech loader A firearm loaded through the breech.

Buckshot Large lead pellets used in shotgun shells.

Bullet A projectile designed to be fired from a rifled barrel. Found at the front of a cartridge.

Butt The rear end of a rifle or shotgun (the portion that rests against the shoulder.) In a handgun, the bottom part of the grip.

Butt Plate

A plate which covers the butt. Some butt plates have trap doors covering a compartment to store cleaning equipment.

CPFO, CTFO or CP/TFO

Chief Provincial Firearms Officer
Chief Territorial Firearms Officer

Calibre

The inside diameter of the barrel of a firearm. Rifled barrels are measured between the lands or grooves in Imperial or Metric units. Also may include special cartridge design features such as case shape and size, etc. (e.g. .308 Winchester, .38 Special, 9 x 19 mm)

Cap

See Percussion Cap.

Carbine

A light short-barrelled rifle.

Cartridge (See shell)

A complete unit of ammunition consisting of a case, primer, propellant charge and a projectile. Modern cartridges are generally classified in two categories—centre-fire and rimfire.

Centre-fire cartridges include all metal cartridges that have primers in the centre of their base. Rim-fire cartridges include all cartridges that have primer sealed in the rim around the base. Also called a Round.

Centre-fire

See Cartridge.

Chamber

The enlarged portion at the breech end of the barrel or the cylinder in which the cartridge is placed ready for firing. A revolver cylinder is multi-chambered.

Charge

The amount, by weight, of the propellant in a cartridge.

Choke

Narrowing at the muzzle end of a shotgun barrel which controls the spread of the shot pattern.

Cleaning kit

A set of accessories used to clean and maintain a firearm. Parts of the kit are sometimes stored in the butt of a firearm.

Cock To set the action into position for firing. On some firearms the action has an intermediate

position called half cock. On muzzle-loading firearms, the cock holds the flint or match.

Comb The upper edge of a rifle or shotgun stock where the holder's cheek rests.

Conical bullet A cylindrical shaped bullet with a cone shaped tip.

Core The part of a bullet that is covered by a jacket.

Corrosion The gradual eating away of the metal parts of a firearm caused by rust or chemical

reactions.

Crimp The portion of a cartridge or shell case that is bent inward to hold the bullet or shot in

place.

Cross-bolt safety A device that blocks the firing mechanism of a firearm. Also see Slide safety, Tang

safety, Wing safety.

Cross-hairs The sighting lines in a telescopic sight.

Cylinder The part of a revolver that rotates and in which chambers are bored to hold cartridges. It

combines the functions of magazine, feed system and firing chamber.

Cylinder bore A shotgun barrel having the same diameter throughout, i.e. without choke. It is used to

fire solid slugs.

Dangerous range See Range.

DEWAT An acronym for <u>De</u>activated <u>War Trophy</u>. Now, generally refers to a firearm that has

been neutralized by cutting and welding of its major parts.

Dominant eye See Master eye.

Double-action A revolver that both cocks and fires with one complete pull of the trigger.

revolver

Double-barrel A firearm with two barrels, either side-by-side or one over the other.

The direction from the shooting position towards the target on a range. See Range. Down range

"Firing" of an unloaded firearm to practice handling and shooting techniques. Can Dry firing

damage some types of actions, particularly rim-fire.

Dummy tion. See also Live ammunition. Ammunition

Effective range See Range.

The mechanism which expels the cartridge or case from the firearm. **Ejector**

A measure of how far and how fast the projectile can go and the amount of damage it Energy

can create on impact. (the amount of work done by a projectile, measured in joules or in

Inactive ammunition used for practising handling of firearms. Also called inert ammuni-

foot pounds)

The removal of a cartridge or case from the chamber of a firearm. Extraction

See Firearms Acquisition Certificate. FAC

The action of moving a fresh cartridge from the magazine into the chamber. Feed

Taking apart a firearm for regular maintenance and cleaning. Field stripping

Any barrelled weapon from which a projectile can be discharged at a velocity exceeding **Firearm** 152.4 meters/second (500 feet/second) muzzle velocity which is capable of causing

serious bodily injury or death, including the frame or receiver of such a weapon.

(also FAC) A certificate issued by a firearmsofficer under Certificate Section 106 or **Firearms**

Section 107 of the Criminal Code. A person seeking to acquire a firearm must be in

possession of a valid FAC.

The person who receives application for FACs and Minors' Permits. Firearms Officer

January, 1994

Aquisition

Certificate

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Firing pin The part of the breech mechanism which strikes the primer of the cartridge.

Flash suppressor Muzzle attachment designed to cool emergent gases and prevent or reduce muzzle flash.

Flat-nosed bullet A bullet with a flattened front end, used mainly in cartridges designed for rifles with

tubular magazines.

Flechette A fin-stabilized small dart encased in a discarding sabot (case) and loaded into a shotshell

or cartridge. Usually, one cartridge will contain a number of flechettes. A prohibited

type of ammunition.

Flint-lock The gunlock of early firearms in which flint is struck against steel, causing sparks to

ignite the powder charge.

Floor plate The detachable metal plate at the bottom of some cartridge magazines. (The floor plate is

usually hinged at the front and held by a release spring located just ahead of the trigger

guard.)

Follow-through The act of staying in the same position after squeezing the trigger or of continuing the

swing in firing at a moving target. This helps to shoot accurately.

Forcing cone In smooth bore barrels, a cone which joins the chamber to the bore. It assists the passage

of the projectiles from the shotshell into the bore. Also called the Throat.

Forearm The forward part of a two piece stock. Sometimes called a slide on pump action

firearms.

Fore-end The forward portion of a one-piece shoulder-arm stock. Located under the barrel, the

fore-end serves as a hand-hold. Also called fore-stock.

Frizzen The metal arm of a flint-lock mechanism, against which flint strikes to create sparks in

the flash pan. Also called the Battery.

Full cock The position of the hammer or striker when the firearm is ready to fire.

Full metal jacket

A bullet with a jacket, usually of harder metal, encasing the core. Also called a hard-nosed bullet.

Fully automatic

A firearm capable of firing cartridges in rapid succession during one sustained pressure of the trigger.

Gauge

The measurement of the diameter of a shotgun bore.

Genuine Gun Collector An individual who:

- possesses or seeks to acquire one or more restricted weapons that are related or distinguished by historical, technological or scientific characteristics;
- has knowledge of those characteristics;
- has consented to a periodic inspection conducted in a reasonable manner and in accordance with the regulations, of the premises in which the restricted firearms are to be kept;
- and has complied with such other requirements as are prescribed by regulation respecting knowledge, secure storage and the keeping of records in respect of the restricted weapons.

Grain

A unit of weight (7,000 grains equal one pound) commonly used to measure the weight of ammunition components.

Grandfathering

A term used to describe legislative provisions that assign special status based on property or other interests that exist at the time a legal change takes effect.

Grip

The small portion of the stock gripped by the trigger hand.

Grooves

See Rifling.

Half cock

A safety feature on some firearms. The hammer is pulled back half-way, so that it cannot be fired by squeezing the trigger.

Hammer

The part of the action that drives the firing pin forward.

Handgun A firearm designed to be aimed and fired by the action of one hand.

Hangfire A malfunction causing a delay in firing a cartridge after the firing pin has struck the

primer.

High intensity Refers to cartridges having velocities of 822.96 metres per second (2,700 feet per

second) or more.

High power A term applied to the first smokeless powder cartridges with velocities of approximately

609.6 metres per second (2,000 feet per second).

High power rifle Generally, a firearm that uses centre-fire ammunition.

Holding The action of keeping the sights on the target while squeezing the trigger.

Hollow point A bullet with a hollow at the tip (nose) that makes it expand more on impact.

Homicide The intentional killing of one person by another.

Hull The outer covering or casing of a shotgun shell.

Injury Harm or damage.

Jacket The outer covering over the inner metal core of a bullet.

Kick See Recoil.

Lands See Rifling.

Large capacity A term used in the <u>Criminal Code</u> to place limits on the capacity of magazines. The limits are:

• centre-fire semi-automatic rifle and shotgun: 5 shots;

rim-fire rifle: no limit, and,

• all handguns: 10 shots.

Particles from shot or bullets that stick to the metal surface of the bore due to heat or Leading friction.

An action operated by a lever located underneath it. (A secondary purpose of the lever is Lever action to serve as a trigger guard).

An imaginary straight line from the shooter's eye to the point of aim (usually through the Line of sight sights).

Ammunition containing primers and propellants, as opposed to dummy or inert Live ammunition ammunition which is free of the above and does not "fire."

To prepare a gun for firing by inserting ammunition into it. Also, a charge of powder, a Load projectile or a cartridge.

The hinged cover over the opening through which cartridges are inserted into the Loading gate magazine.

The person who receives applications to register restricted weapons and issues permits **Local Registrar** relating to restricted weapons.

> The firing mechanism of a muzzle-loader. In firearms that are loaded through the breech, the lock is the firing mechanism and breech-sealing assembly.

A firearm that fires cartridges continuously during a sustained pull of the trigger. See fully-automatic.

The part of a repeating firearm which holds the cartridges or shells ready to be loaded one at a time into the chamber. The magazine may be part of the firearm or a separate device attached to the action.

Spring actuated platform in a magazine that pushes cartridges or shells to the feeding position. Should be clearly in view when checking that a firearm is completely unloaded, particularly with tubular magazines.

of Firearms

Machine gun

Lock

Magazine

Magazine follower

Magnum A cartridge or shell with a larger capacity or with a higher velocity than average (e.g. 3.5

inch magnum shot shell, .300 Magnum rifle). Firearms that use magnum ammunition can

also be called magnum.

Mainspring A strong spring which activates the striker or hammer of a firearm.

Malfunction The failure of a firearm to work properly, caused by a jam or stoppage, or a mechanical

or structural failure.

Master eye The 'stronger' eye; the eye through which a person usually views an object as when

sighting a firearm.

Match A long cord soaked in saltpetre, which burns slowly, and is used to ignite powder in early

firearms.

Matchlock A firearm action which uses a serpentine or S-shaped piece of metal to hold a

smouldering match. The burning match contacts the priming powder in the pan to ignite

the charge.

Metal cased A bullet with a lead core and an outer jacket of a stronger metal.

Metallic cartridge A cartridge with a metallic case. Early cartridge cases were made of linen, paper, etc.

Mid-range The point in the trajectory halfway between the muzzle and the target.

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Minie ball which spreads as it is fired.

Mini-ball or

Minors' Permit A permit allowing a youth 12 years of age or over but under the age of 18 to possess and

use firearms. The permit allows young people to use such firearms under a number of supervised conditions such as target practice, hunting or instruction in the use of fire

A cylindrical shaped bullet used in muzzle-loaders, with a pointed tip and a hollow base

arms. These permits require the consent of a parent or guardian.

Young people who hunt or trap to sustain themselves or their families may obtain Minors Permits with no conditions of supervision required. All Minors Permits are issued free of

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charge. The use of a firearm by a minor is also subject to provincial or territorial legislation (e.g. hunting laws).

Misfire The failure of a cartridge to fire after the firing pin has struck the primer. Do not confuse

with Hangfire, which is a delay in firing.

Mushroom The shape many soft-point bullets become when they expand upon impact.

Musket An early smoothbore shoulder firearm.

Muzzle The forward end of a barrel.

Muzzle brake A device attached to the muzzle which softens the recoil of the firearm.

Muzzle-loader A firearm that is loaded through the muzzle.

Open sight A type of firearm sight, usually with a "V" or "U" notch in the rear sight. See Sight

Optical sight Usually a telescopic firearm sight. See Sight.

Order in Council An executive order enacted by the Governor General based on the advice of the Queen's Privy Council. In practice, this involves the federal cabinet, acting on specific statutory

powers delegated to it by Parliament. Orders-in-Council are used when urgent action is required. (i.e.- the Governor in Council may act directly to declare new types of

weapons to be restricted or prohibited under Section 84(1) of the Criminal Code)

Over-and-under A firearm with two barrels placed one over the other.

Pan The small container located on the side or top of a matchlock, Wheel-lock or flint-lock

firearm used to hold the priming powder.

Patch A small piece of leather or cloth that is greased and placed around a bullet before

ramming it down the barrel of a muzzle-loader. Also a piece of cloth drawn through the

bore of a firearm to clean it.

Patch box A small compartment in the butt of a muzzle-loader used to store patches or other small

The distribution of shotgun pellets from a single shot. Pattern

Peep sight A rear sight with a hole through which the target is viewed. See also Aperture sight.

Pellet Small round projectiles loaded into shotgun shells. Usually referred to as shot. Also a

lead projectile used in some air guns.

Penetration The depth that a projectile travels into a target before it stops.

Percussion cap A small metal explosive-filled cup which is placed over the nipple of a percussion

firearm.

Allows a person to have a restricted firearm in a place other than that listed on the **Permit to Carry**

registration certificate of that gun, e.g. at an approved shooting club or for use in lawful

occupation. The Carry Permit may be issued to a person other than the registered owner

of the firearm.

Begins the registration process by allowing someone applying for a registration certifi-**Permit to Convey**

cate to bring the firearm he or she wishes to register to the local registrar of firearms for

examination and identification.

Allows a person in possession of a restricted firearm to bring it to and store it at another Permit for **Temporary Storage**

place for a period not exceeding one year. (i.e. for security when on vacation or during a

Allows a person to transport a restricted firearm from one specific place to another

temporary crisis situation).

Permit to

(also Temporary Storage Permit)

specific place. The permit may be issued to transport a registered firearm only for **Transport**

acceptable reasons, such as a change in residence, repair.

The general term for any propellant used in firearms which burns upon ignition. The two Powder

major types are black powder and smokeless powder. Also called Propellant.

Powder burn The charring of a surface caused by gunshot residues.

Powder charge The amount of powder by weight in a cartridge case or chamber.

Prime To prepare or charge a muzzle-loader for firing.

Primer The overall term for the priming compound, cup and anvil which, when struck, ignites

the powder charge.

Prohibited

A weapon defined by the <u>Criminal Code</u>, or Order in Council. The list includes fully-Weapon automatic firearms, firearms which have been altered (i.e.- "sawed off") to reduce barrel length below 457 mm, or overall length below 660 mm. It also includes other weapons,

many of which are not firearms.

Prohibition

Order

A court order prohibiting a person from possessing any firearm, explosive or ammunition for a fixed period of time up to and including life. Usually issued in response to viola-

tions of the Criminal Code related to the use of firearms during a criminal offence involving the use, threat or attempt of violence. Also can be sought by police where they

have reasonable grounds to assume the possession of firearms would not be in the

interest of safety of "any person", including the subject him or herself.

Projectile A bullet or shot in flight after firing from a firearm.

The chemical substance which, when ignited, propels the projectile. Also called Powder. **Propellant**

The cord used to draw a bore brush or cleaning patch through the bore of a firearm. **Pull-through**

Ramrod A wood or metal rod used to push the patch and bullet down the barrel of a muzzle-

loader.

The distance travelled by a projectile from the firearm to the target, or its maximum Range

> travelling distance. "Effective range" is the greatest distance a projectile will travel with accuracy. "Dangerous range" is the maximum distance at which a projectile will pierce a

target. Also, an area or facility designed for the safe shooting of firearms.

Recoil

The backward movement of a firearm when it is fired. Also called Kick.

References

When applying for an FAC, references are persons who have known the applicant for at least 3 years and can verify information provided by the applicant. They must hold certain positions, have certain professions or certain relationships with the applicant. (i.e.- teacher, bank manager, police officer or constable, doctor, veterinarian, accountant, fellow employee or spouse, etc.) See the Introduction Section for a detailed listing of references.

Regulations

A legislative authority delegated by Parliament to another individual or body, most commonly the Governor in Council. Generally regulations are authorized where adjustments must be made to a statutory rule and amending the statute itself is too timeconsuming or impracticable.

Registration Certificate

Restricted Weapon A certificate permitting the possession of a restricted firearm by persons meeting the following requirements:

- (a) the applicant for the certificate is the holder of a firearms acquisition certificate and is eighteen or more years of age, and
 - (b) the restricted weapons to which the applications relates bears a serial number sufficient to distinguish it from other restricted weapons or, in the case of an antique firearm that does not bear such a serial number, it is accurately described in the application, and further that the restricted weapon to which the application relates
 - is required by the applicant
 - to protect life, (i)
 - for use in connection with his lawful profession or occupation, (ii)
 - for use in target practice under the auspices of a shooting club approved for the purposes of this section by the Attorney General of the province in which the premises of the shooting club are located or by an agent specially designated by that Attorney General in writing for the purpose of this subsection, or

- (iv) for use in target practice in accordance with conditions proposed to be attached to the permit to be issued in respect of the restricted weapon under subsection 110(1),
- (d) will form part of a gun collection of the applicant who is a genuine gun collector and who has complied with any regulations relating to the secure storage of, and the keeping of records respecting, restricted weapons made pursuant to subsection 116(1), or
- (e) is or is deemed pursuant to paragraph 116(f) to be a relic for the purposes of this Part.

Restricted Firearm (Weapon)

Classes of firearms that require a registration certificate. See Section 1 for a detailed description.

Revolver

A repeating handgun that has a revolving cylinder with a series of chambers. The cylinder may revolve in either direction depending on the manufacturer.

Revolving Action

An action with a revolving cylinder containing a number of cartridge chambers. One chamber at a time lines up with the barrel as the firearm is fired.

Ricochet

The redirection of a projectile after impact, usually with a hard surface.

Rifle

A shoulder firearm with a rifled barrel designed to fire one projectile at a time. See Rifling.

Rifled slug

A large, single projectile used in shotguns.

Rifling

Spiral grooves inside the barrel which make the bullet spin, so that it will fly straight. The depressed portions of the rifling are called grooves and the raised portions are called lands.

Rim

The edge on the base of a cartridge case. The rim is the part of the case that the extractor grips to remove the cartridge from the chamber.

Rimfire A cartridge that has its primer in the rim of its base. See also Cartridge.

Rod A rod inserted through the barrel from muzzle to chamber to check for obstructions prior

to loading the firearm. Also may be referred to as ramrod, proving stick or dummy rod.

Round One shot fired by a firearm. Also a complete item of ammunition or a cartridge which

has all the components needed to fire one shot.

Round nose bullet A bullet with a rounded nose.

Safety A device that blocks the firing mechanism of a firearm. Also see Cross-bolt safety, Slide

safety, Tang safety, Wing safety.

Sear Part of the firing mechanism, linked to the trigger, which retains the hammer, firing pin or

striker in the cocked position until the trigger is squeezed.

Secure Locking

Device

A device that:

• can only be opened or released by the use of an electronic, magnetic or mechanical key or by setting the device in accordancewith an alphabetical or

numerical combination, and

• when applied to a firearm, prevents the firearm from being discharged.

(i.e. - trigger lock or cable lock, etc.)

Semi-automatic An action which fires, extracts, ejects, reloads and cocks with each separate pull of the

trigger and is powered by the propellant gases. Also called auto-loading or self-loading.

Semi-wad cutter A cylindrical bullet with a short truncated cone at the nose. Often used for paper target

shooting.

Shell A complete unit of ammunition consisting of a hull, primer, propellant charge, wad and

projectile(s) for use in shotguns.

Shotgun A firearm with a smooth bore designed to fire small pellets called shot.

Shot shell The cartridge used in a shotgun. It contains shot pellets or a slug rather than a bullet.

Side by side See Double-barrelled.

Sight A firearm device, either mechanical or optical, that helps the shooter aim accurately.

Single Action A revolver which requires the hammer to be cocked manually before pressing the trigger will cause it to fire.

Will challe it to file.

Slide safety A device that blocks the firing mechanism of a firearm. Also see Cross-bolt safety, Tang

safety, Wing safety.

Sling A strap used to carry and aid in aiming a rifle.

Slug See Rifled slug.

Small bore Generally refers to a .22 calibre firearm or ammunition.

Smokeless Powder Propellant powder used in modern firearms.

Smooth-bore A firearm with a bore that is not rifled, such as a shotgun.

Soft point bullet A bullet with a partial jacket exposing a portion of the lead core at the nose.

Spire point bullet A bullet with a cone-shaped nose.

Spent bullet A bullet which has lost nearly all its energy and lacks the force needed to penetrate the

target.

Stock The part of a rifle or shotgun used to hold against the shoulder when firing.

Suicide The act of voluntarily taking one's own life.

Sustenance Hunting for the primary purpose of obtaining food which forms a significant part of the

Hunting diet of the hunter and/or his/her dependants.

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Tang safety A device that blocks the firing mechanism of a firearm. Also see Cross-bolt safety, Slide

safety, Wing safety.

Throat The forward portion of the chamber that is tapered to meet the bore.

Tracer bullet A bullet that has a burning compound in its base which permits observation of its flight.

Trajectory The curved path a projectile travels from muzzle to impact.

Trigger The part of the firearm mechanism which releases the cocked action to fire the

ammunition.

Trigger guard The metal loop around the trigger made to protect it and prevent accidentally touching

the trigger.

Unloaded A firearm containing no ammunition. (i.e.- one in which any propellant powder, projectile

or cartridge that is capable of being discharged from the firearm is not contained in the breech or firing-chamber nor in a cartridge magazine attached to or inserted into the

firearm)

Velocity The measure of the speed at which a projectile travels.

Wad A disc used to separate powder from shot; or to seal propellant gases behind the shot; or

to hold the shot together in the barrel.

Wad-cutter bullet A cylindrical bullet with a sharp, shouldered, nearly flat nose designed to cut paper

targets cleanly to assist accurate scoring.

Wheel-lock An early firearm mechanism in which a wheel with serrated edges is spun against a piece

of iron pyrite, sending sparks into the pan to ignite the charge.

Wing safety A device that blocks the firing mechanism of a firearm. Also see Cross-bolt safety, Slide

safety, Tang safety.





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