

Introduction to Guns and Gun Safety in the Home:

A Course for Youth and Adults
Instructor's Handbook



Instructor's Handbook

This clinic is an introduction to guns and gun safety. It has been written as if you were making a presentation to a group of babysitters and their parents or guardians. By simply changing a few words, but not the basic concepts, **you can adapt this information to a variety of audiences.**

It could just as easily be given as an evening clinic called An Introduction to Airguns and Gun Safety. As an introductory program, the clinic would probably be attended by second and third grade age participants and their parents or guardians. In this case, you could move the section on “questions a babysitter should ask” to the “adults only portion” at the end of this handbook and eliminate most of the other references to babysitters. Another example would be An Introduction to Guns for Adult Women Only. In such a clinic, you may want to shorten the babysitting portion and history of airguns and allow the participants to shoot pellet handguns in addition to the rifle.

Advertise the clinic with a specific group in mind. Also include a statement that a parent or guardian must accompany any participant under the age of 18.

Just talk to the group, using the information presented here along with the overhead transparencies or the companion video tape (masters for the overheads are found at the back of this manual). These visual aids will help to review and reinforce the major topics introduced in the clinic. Practice your presentation ahead of time. Highlight the main points to be covered so you'll know what to say. If you decide to use the video tape, remember that you have a pause button on the machine! You can also request this clinic presentation on CD and use a laptop computer, video projector, and screen to conduct the clinic. You control the speed of the program with just a click of the mouse. The computer and video projector may be available from a DNR regional office. Ask your conservation officer how to reserve this equipment.

Remember this is an “introductory” clinic. You have limited time and the youth come with limited life experiences to draw from as they try to relate new information to past experiences. Keep this in mind as you conduct your clinic. The new terms and concepts which they are learning are like learning a foreign language so bring the instruction down to their level of understanding. You want them to have a positive experience, leaving with a better understanding of gun safety and as an informed citizen who supports gun safety education.

Note also that, if time permits, you may have the youth return to the range near the end of the clinic while additional material is presented to the adults.

This clinic outline is written in a “word-for-word” format, based on our experience of teaching many babysitters. We suggest that you read it through several times and then go back and highlight the main points in each paragraph. With practice you will be able to present the concepts in your own words and adapt the material to your specific audience.

Please use the term “gun,” rather than firearm or weapon, during this clinic. It is a term most beginners understand. It’s “guns” that have a negative reputation because of media exposure and which this clinic will help correct. In other hunter education courses, such as Firearms Safety and Advanced Hunter Education, “firearm” is the correct term to use. Use the term “weapon” only when referring to the protection of people. By definition a weapon is an instrument for combat and that is not what our courses are about.

All guns used in this clinic should have a red ribbon tied around the barrel near the muzzle to reinforce learning proper muzzle control.

Goal:

Provide an opportunity for the inexperienced gun handler to replace misinformation, curiosity, and fear about guns with knowledge, understanding, and respect. The course also introduces participants to the lifetime skills which can be learned through shooting, and presents information about gun use for recreation and in various professions.

Objectives:

Young persons, including babysitters, and their parent(s) or guardian will learn basic gun handling techniques, rules of gun safety in the home, and have the experience of shooting an air rifle.

Materials Check List

Instructors may want to provide some of their own materials. Air guns are available to instructors at reduced prices. (See details immediately following the end of this clinic outline.)

. See Appendix 3 for additional information on materials.

Airgun range backstop:

Primary consists of 4-6 cardboard boxes filled with newspapers/magazines as shown in Appendix 1 of the Participant Handbook.

Secondary is a crossbeam support of some type which can be made from PVC pipe or a 2" x 4" wood frame, draped with carpeting and has a ½-inch plywood sheet on the backside of the carpeting. The carpeting slows any pellet which would miss the box and also prevents it from ricocheting back off of the plywood which stops it.

Instructors provide as available:

Various gun locks, gun cases, etc.

Various types of powder-burning rifles, shotguns, and handguns. Ideal assortment would include rifles and shotguns with various actions (bolt, pump, semi-auto, hinge, lever).

Various empty rifle, shotgun, and handgun shell/cartridges.

Four 5-quart ice cream buckets (or something similar) for washing safety glasses.

Disinfectant soap.

Pre-clinic Preparation and Setup

Instructors should familiarize themselves with the operation of the airguns they will be using. Also, check that they are sighted in for the distance they will be used at and check that the batteries work on the red dot sights.

Arrive two hours before the clinic starts. Prior to the clinic, provide team members with instructions to set up specific activities.

Q Registration materials ready—see Arrival, below.

Q Classroom seating, handouts, AV equipment checked.

Q Range set up: backstop, guns, materials.

Q Stations/displays set up in range activity area.

Q Have a pencil for each participant.

Q Select a volunteer (first-time shooter preferred) who will demonstrate the shooting position.

Q Begin exactly at advertised time.

Arrival

As participants arrive, have each of them complete a “parental release form.” Parents or guardians must sign the release for their youth as well as sign their own form. The fee is \$5 for those who are 12 and older. Currently active AHE, FAS, or MBEP instructors, and those 11 and younger are free. Instructors may increase the fee by up to an additional \$5 to cover the cost of refreshments, teaching aids, or room rental. However, don’t price yourself out of business!

Have participants fill out a name tag.

Give each participant or group of participants a Clinic Participant Handbook and Hunting the Right Way brochure. **Ask them to do Activity #1** (page 1 in the Participant Handbook.) Emphasize that they are to do ONLY Activity #1.

Have a team member check to ensure that all the “parental release forms” have been properly completed.

Video Show the video, Learn Gun Safety With Eddie Eagle, as participants arrive. Begin showing the video seven minutes before the clinic starting time.

Instructor's note: The video helps "set the tone" for the clinic, is informative, and encourages participants to sit down.

Notes for the instructor are in italics

I. Welcome: 10 minutes

A. Ask everyone to take their seats, then welcome them.

Use the following outline to prepare your opening dialogue:

1. Welcome participants to the clinic.
2. Your name.
 - a. State your name.
 - b. Write it on a board so that everyone can see it.
 - c. Tell the participants how you wish to be addressed. What do you want them to call you?
3. Your background related to the program. Select a couple of the following items to share.
 - a. Your training as an instructor.
 - b. Number of years as a DNR volunteer instructor or your teaching experience.
 - c. Your efforts to improve as an instructor (additional training sessions and self-learning programs you have completed).
 - d. Your experience relative to the course. Remember, hunting is not a competitive sport so avoid the "score card," that is, how many of each species you have harvested, etc.
 - e. Your love and enjoyment of helping new users of the out-of-doors learn to "do things right." That you love to teach and that you are proud to be their instructor.
4. Introduce the other instructors and tell participants that you are all volunteers.
5. Your expectations of the participants.
 - a. They will learn the importance of knowing about guns and gun safety.
 - b. They will learn the concepts and behaviors necessary to safely handle guns.
 - c. They will respect you, your team of instructors, and their classmates.
 - d. That you know they will learn as well as enjoy the clinic.
6. Basic information.
 - a. Restroom and water fountain locations.
 - b. Clinic will be done at approximately _____ (2 hrs. and 30 min.).

- c. Should keep your participant handbook with you throughout the clinic.
- 7. Advise them that credit towards their Advanced Hunter Education certificate is given to those who are 12 and older.
- 8. Welcome them again.

II. General Overview: 30 minutes

A. Introductory comments

Guns have been in American homes since the founding of the country and continue to be used today. Ask: What are some specific uses for a gun? *Call participants by name and say please and thank you. Get three to four responses. Remind participants that there are no wrong answers.*

The responses can be categorized into four areas of use: professions, recreation, security, and food gathering.

What are some professions which use guns or need to know how to handle them? Babysitters, actors, zoo keepers, museum curators, security personnel, attorneys, jurors, judges, race starters, dog trainers, military and law enforcement personnel to name a few.

In our homes we are familiar with kitchen knives and poisonous household cleaning products. These are common everyday tools which can be properly or improperly used. Basic instruction and expectations for safe use of these tools is necessary.

Is a gun a tool? *Get responses.*

Likewise, everyone should know about gun safety and we owe it to children to teach them basic instruction, expectations of proper use, and what to do when they find a gun.

B. Outline of the clinic

This clinic is designed to give young people, especially babysitters, information and experience so that they can act responsibly toward guns. **Overhead #1¹**. Our goal is to provide information and experiences which will help you replace misinformation, curiosity, and fear about guns with knowledge, understanding, and respect. *Be quiet for a few seconds, then put up Overhead #2.*

During this clinic we expect that you will learn:

1. Basic terms about and types of guns
2. How to safely hold, shoot, and store a gun

¹Masters for making overheads are at the end of this manual.

3. What babysitters should know about guns—including what to do if a young child suddenly appears with a gun
4. Optional: Adults only—how to make a gun safe and how to teach youth about gun safety

There will also be several displays and hands-on learning opportunities throughout the clinic.

Education helps reduce accidents. We know that fatal gun accidents among children decreased 64 percent between 1975 and 1995 as the result of proper gun safety and handling education—the same information you will learn at this clinic.

Besides learning about gun safety and handling, we hope this clinic will be the beginning of a lifetime sport for you, your family, and friends.

Shooting can be a fun family time activity for all ages, skill levels, and physical abilities.

Many **benefits are derived from acquiring shooting skills**:

- ! develops eye-hand coordination and fine motor skills
- ! enhances visualization skills
- ! teaches self-discipline and self-control
- ! improves concentration
- ! increases one's sense of responsibility
- ! provides an opportunity for goal setting
- ! builds confidence and self-esteem

Many colleges, including some of the best medical colleges, offer **scholarships** to members of shooting teams. At the college level, both men and women participate and compete in shooting sports.

U. S. Department of Justice studies show that ninth and tenth grade boys who legally own a gun have a 58 percent **lower crime rate** than those who do not. The gun ownership is a way to "count the results". Other factors were also involved to cause this result. Perhaps it was learning the responsibility and trustworthiness associated with gun use and ownership or maybe the higher expectation, additional instruction and extra time an adult spent role modeling for the child. At a very young age children need to be given responsibilities to accomplish, shown that they are expected and trusted to accomplish these responsibilities and then be held accountable to accomplish them.

See U. S. Department of Justice, *Office of Juvenile Justice and Delinquency Prevention (OJJDP), Urban Delinquency and Substance Abuse Initial Findings*, page 18.
www.ncjrs.org/pdffiles/urdel.pdf

One instructor should check the "parental release forms" to make sure they have been filled out accurately and completely, signed, and turned in. Make corrections during the break.

III. Video: Part 1 of Gun Safety Begins at Home

A. *The following activities are included in Part 1 of the video. Go through the material and then use the video to “review” what they have learned.*

Please do **Activity #2** in your participant handbook.

Approximately 54 percent of the households in the United States have guns in them. Most Minnesota homes have guns in them. Over 30 percent of American households that have guns and children in them keep a loaded gun in the home. Circle the correct answer if you didn't get it right in your participant handbook.

Whether or not a family owns a gun, most children will come in contact with a gun at some time during their young lives. Relatives and neighbors own guns, often hidden or properly stored, but the possibility exists that children may still find them.

Young people are curious about guns. Beginning with the time when you were first aware of images, you have been exposed to guns countless times through cartoons, television programs, and movies.

When you were about 18-months old, you knew that something was happening on TV, but it wasn't until you were five- to seven-years old before you could understand the difference between what was only a show and what was real life.

When should a child start learning about guns? It is recommended that teaching begin when the child begins to show curiosity about guns and wants to touch and hold them. If the child doesn't express any curiosity about guns, then it is up to the parent to decide when you want to start teaching about them. As a guideline, you might ask yourself when you would teach your child about kitchen knives, for example.

What should a child first learn about guns? *Discuss and then summarize the discussion by filling in the blanks in Activity #3 (**Overhead #3**).*

As a summary of our discussion, fill in the blanks of **Activity #3** in your participant handbook.

1. A child only holds or touches a gun if a parent or responsible adult is present and gives permission.
2. If no parent or responsible adult is present when a child sees a gun, they should:

stop,
don't touch,
leave the area,
tell an adult.

These four steps are part of the Eddie Eagle Program which is a proven way to teach

young children how to respond properly around guns. Materials for pre-K–1, 2–3, and 4–6th grade participants are free and available from the National Rifle Association (NRA) at **1-800-231-0752**.

B. Parent's and babysitter's questions

Most accidents associated with guns in a home can be prevented if a parent or babysitter asks questions about the presence of a gun in the household and about how the gun is stored.

Babysitters need to ask if the home where they are babysitting has a gun and if it is properly stored. Occasionally, an improperly stored gun could be found by a child. A babysitter is the responsible person present and must know how to handle an improperly stored gun.

What about when you visit or sleep over at a friend's home? Your parents may want to ask a few of the same questions.

Now we are going to see what we just talked about in a two-minute video.

Show the first portion of Gun Safety Begins at Home (1 minute and 25 seconds). Stop after CO Larson says, "Here's what you can do to keep your home the safe place you want it to be."

What are the questions that should be asked? *Discuss and then summarize. Adapt their responses to the following model and have them do Activity #4 (**Overhead #4**).*

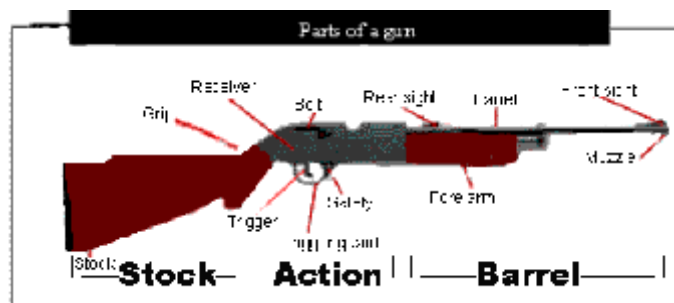
Fill in the blanks for **Activity #4**.

1. Are there any knives, poisons, or guns in the house and are they stored properly?
2. What are the rules you have regarding the children using play as well as real knives and guns while I am babysitting here?
3. What do you want me to do if a gun is found?

IV. Guns and rules

A. Basic terms associated with guns

Instructor's note: Use Overhead #5 and/or one or two posters. You may also want to have several instructors walk around the room carrying a Crosman 1077 airgun with a red dot



sight. They should show everyone that the gun is unloaded and then point out the parts of the gun. They should use the double-handed carry as they walk around. There are two reasons we use the red dot sight on the airgun in the shooting portion of this clinic: (1) to simplify the sight picture that first-time users need to understand, and (2) it seems to be more universally useable by people with glasses or who have eyesight problems. Color blind people can use it, too.

We will now learn the basic names for the parts of a gun. This will help you understand the instructions as you learn how to pick up a gun and handle it safely.

Point out the three main parts: Stock, action, and barrel.

*Point to the following parts on the Crosman 1077 rifle and on the poster or **Overhead #5** as you say the names of the parts.*

Stock

The stock is the part of the gun you hold. It includes: **butt, grip**—demonstrate how they will take hold of the grip to pick the gun up from a table—and **forearm**. You will get to practice picking up and properly carrying a gun a little later in the clinic.

Action

The action is the part of the gun where the ammunition is loaded and fired. It includes: **receiver, trigger, trigger guard, safety, magazine, and bolt**. The safety is a mechanical device which is designed to prevent the gun from firing. It isn't a substitute for safe gun handling or following the safety rules—it's mechanical and may fail, allowing the gun to be fired. Your actions determine the true safety of the gun.

Barrel

The projectile ("bullet") passes through the barrel and its direction is controlled by this part. The end, where the projectile comes out, is called the muzzle. Attached to the barrel are the red dot, optical, or iron sights which are used for aiming. The red dot sight we are using is a type of optical sight, but has no magnification. It also does not project a light beam like a laser sight such as those seen on TV.

Point out the **muzzle**—the part where the projectile exits. Tie a red ribbon around the barrel as near to the muzzle as you can. I am tying this red ribbon near the muzzle to remind you to always control where the muzzle is pointed.

Overview of how these parts work together: On the Crosman 1077 airgun, when you pull the trigger some pressurized CO₂ gas (carbon dioxide—the same gas we release when we exhale a breath) is released and this pushes the pellet down the barrel.

Please turn to page 3 in your participant handbook and do **Activity #5**. Write in the parts of a gun in the appropriate places.

B. The different types of guns

There are three basic types of guns: rifle, shotgun, and handgun. Each looks and works a little differently. As I talk about these, you can complete **Activity #6**.

*If possible, instructors should also bring a powder-burning rifle, shotgun, and handguns to show, in addition to the airguns. For each gun: hold it properly, show the participants that it is unloaded, and tell something about it—a sentence or two about each gun (**Overhead #6**).*

Rifle

Is used for long-distance shooting and shoots a single projectile. The ammunition is called a rifle cartridge. This is a “dummy” rifle cartridge from a .308 rifle. It is unloaded and made for demonstrations. I will pass it around along with a previously fired cartridge from the common “twenty-two” (.22) rifle so you can touch and look closely at both of them. Show rifle cartridge cut-away (**Overhead #7**).

Shotgun

Is used for shorter distances, generally 50 yards or less and, except for a slug, shoots multiple projectiles each time. The ammunition is called a shotgun shell. I will now pass around dummy, see-through shotgun shells, as well as fired actual shells for you to look at and touch. Show shotgun shell cut-away (**Overhead #7**). A slug is a single projectile of lead.

Handgun

Two types:

Revolver (cylinder revolves as hammer is cocked). Cocking means that the hammer is brought into a position so that when released, it will fire the ammunition. A “double-action” trigger performs two actions—it cocks the hammer and releases the hammer which in turn fires the revolver. Demonstrate this with the .357 airgun.

Semi-automatic. With each trigger pull, a cartridge of ammunition is fired, new ammunition is automatically fed from a magazine, and the hammer is cocked. This all happens “instantly.”

Handgun ammunition is called a cartridge. I will pass around several dummy cartridges and actual empty cartridges.

Handguns are used for close-range shooting and are easily concealable.

Muzzle loader

This refers to the method of loading rather than gun type, i.e., rifle, shotgun, or handgun since muzzle loaders are made in all three types of guns. The gun powder, patch, and ball (*show the patch and ball if you have them available*) are loaded from the muzzle, rather than coming prepackaged in a shell or cartridge which would be inserted into a gun's

action. The ignition system of a muzzle loader is associated with the hammer—either a cap or flintlock which ignites the powder. Show a muzzle loader if one is available.

Airguns

This refers to the method of propelling a projectile. There are rifle, shotgun, and handgun airguns. In an airgun, “air” forces a projectile out the barrel. This can be created by a spring, pumping air into a cylinder, or prepackaged compressed gas such as air or CO₂. We are using airguns at this clinic. The most accurate guns made are airguns.

Air rifles have been around since at least 300 B.C. in Greece.

The big game rifle used on the **Lewis and Clark Expedition** was an air rifle.

By 1779, the Austrian military air rifle shot 20 .51 caliber bullets per minute, with power equal to today's .45 Colt automatic. It was very lethal to 150 yards.

Modern airguns, in 9mm caliber can shoot 20 times between air recharge at a power equal to a 9 mm handgun cartridge.

The part of the gun which loads and fires the ammunition is called the action. During the range portion of the clinic, you will get to see a variety of gun actions. The main types of rifle actions are semi-automatic, bolt, lever, and pump. The main types of shotgun actions are semi-automatic, pump, hinge, and bolt.

C. How to hold a gun and basic handling principles

*Show as you tell how to correctly pick up a gun by the grip. Hold up the airgun (Crosman model 1077 with red dot sight) using a safe carrying method—the **double-handed carry**.*

As a babysitter, you may find yourself in a situation where you are the only responsible person around when a gun is found which needs to be moved. This is how we pick up a gun by the grip. We need to ensure that our finger is kept off of the trigger. *Rest your finger alongside the receiver.* The trigger seems to act like a “magnet” for people who pick up a gun. This seems especially true for youth. Always watch that you keep your finger alongside the receiver until you are ready to shoot. Remind others to do the same.

In addition to knowing how to pick up a gun, a babysitter must also know how to safely carry a gun. A good way to safely carry a gun, in most circumstances, is the **double-handed carry**. One hand is holding the gun by the grip while the other hand holds it by the forearm.

Now watch the muzzle as I carry the gun in a double-handed carry position. This method of carrying gives you muzzle control if you fall, good control when people are walking with you, and it also keeps the muzzle out of dirt and snow.

If you wish, you may pass around several mouse traps that are already set. Think of the mouse traps as “loaded guns.” Note the red ribbon on the “muzzle” end. Keep your finger away from the trigger. Grip it properly. Keep it pointed in a safe direction. With care, you can safely pass these around. Carelessness will result in an “accidental discharge,” that is, getting your fingers snapped.

D. Three rules to follow as you carry a gun

*Go over the rules with them first. Then go back and talk about and demonstrate the specifics which follow the rules (**Overhead #8**).*

What are some rules about carrying a gun? *Discuss and summarize by doing Activity #7.*

To summarize these rules, we will do **Activity #7**.

Keep your **finger outside the trigger guard** and alongside the receiver, and:

1. **Treat each gun as if it were loaded.** Load it only when you are ready to shoot.
2. Keep the **muzzle always pointed in a safe direction.**

What is a safe direction? Get them thinking about what a safe direction is. The answer should include if a gun is unintentionally discharged, the projectile would not cause injury or damage.

3. Be sure of your target and what is beyond.

Remember the dummy rifle cartridge from a .308 rifle which you saw a little while ago? (*Hold it up.*) How far do you think this bullet/pellet/.22 would go?

Do **Activity #8** in your handbook—Distance a Bullet Travels

Projectile

We will be using pellets. The ends are named the **nose** and **skirt** of the pellet. *Point to these parts on the poster.* Pellets are made of lead and are softer than BBs which are made of hard steel. BBs have a tendency to ricochet or bounce more than pellets. **Bounce a BB** on a hard surface and then bounce a pellet on the same surface. Emphasize that **BBs ricochet easily and are dangerous.** If you have the choice, use pellets. Pellets also shoot more accurately.

After handling any lead object, including pellets, you should **wash your hands**. The lead can rub off onto your hands and act as a poison to your bodies.

Ask “Where will the bullet/pellet go if there is an accidental discharge?” Hold up a loaded .22 cartridge. This is a cartridge from a common .22 caliber gun. If this were accidentally shot into the wall of your house, would it go through?

In your handbook do **Activity #9** which asks you to indicate how many pine boards a .22 will go through.

Now show a .22 that has been shot through a series of one-inch pine boards. A house wall generally has less bullet stopping ability than this—it often is the equivalent of only 2-3 boards. This is just one example of misinformation that is frequently portrayed on TV.

To make this display, attach six 1" x 4" x 6" pine boards to a 1" x 4" x 12" piece of wood. The short pieces are at right angles to the larger board and spaced about ½-inch apart. Then in a safe location, shoot a .22 rimfire long rifle cartridge through the center of the upright board. Have several feet between the muzzle and the first board. Caution: the bullet may pass through all six boards, depending upon the density and dryness of the wood.

Also show and pass around a ¾-inch pine board into which pellets have been shot from various velocity airguns. Tell them this board is much harder than your flesh, yet notice that some of the pellets passed completely through it. A BB from a BB gun, while generally less powerful than any of these pellets, is capable of killing a person.

Emphasize that airguns are real guns. Go back now and make sure your **Activity #9** is marked correctly. That is, that the bullet will pass through four to six boards. *The bullet used to make this demonstration was a .22 rimfire long rifle as used in the DNR Firearms Safety program.*

The pellet will travel between ¼- and ½-mile. The .22 will travel approximately 1-1/2 miles and the .308 will travel approximately 3 miles. Please make sure your Activity #8 is marked correctly.

Show the portion of the video on pellet penetration through two oranges and into a beverage can (one minute and ten seconds). Airguns are real and could easily kill a person if improperly used.

On most guns there is a device called the safety. Since it is mechanical, it can fail. It can also be accidentally released. The location of safeties varies a lot. It is better to treat all guns as if they are loaded and do not have the safety on. You will get to see a variety of safeties when we go to the range in the gymnasium (*or wherever it is located for this clinic*).

Anyone handling a gun should always have a safety attitude, that is, always be thinking safety. People around you, especially children, pick up on this attitude and copy it. Also, when shooting a gun, always wear **safety glasses**. Youth should have **adult supervision**.

There are several ways in which a gun accident can happen. What do you think they are? *Short discussion.*

Answer: Accidents with guns happen when:

1. A person does not know or understand the rules—ignorance,
2. A person fails to follow the rules—carelessness, or
3. A person gets excited.

Education reduces the number of potential accidents because people learn how to handle guns properly, how guns are operated, how to “think safety,” and how to act responsibly.

V. Preparing to shoot a gun

We will now guide you through shooting an airgun. This exercise is intended to help you understand the basics of gun operation and handling, and reduce any anxiety you may feel about guns so that you can better respond as an informed and responsible person while babysitting.

Instructor’s note: Gun handling experience will vary among participants. Direct your presentation toward those who have never handled a gun.

A. Experience with guns varies greatly in this group

Some of you have probably never handled a gun while others may use guns in your professions. This clinic is directed toward those who have never handled or shot a gun. However, even experienced gun handlers can improve their safe gun handling skills and increase their knowledge through additional training. Regardless of your personal experience, as you listen to your instructors and participate in the activities, think about how you can tell others about gun safety.

Instructor’s note: Ask the following question to assess the experience level of the group. This will also provide participants with an understanding of the previous experience of other participants.

“How many have shot more than 50 shots from a gun in your lifetime?”

Those who didn’t raise their hand have very little or no shooting experience.

Regardless of your previous experience, we anticipate that you will learn from and enjoy this clinic.

B. Determining your dominant eye

For safety as well as accuracy, a person needs to know which eye is their dominant eye.

One of your eyes naturally does more of the work, just as you are right- or left-handed. However, for some people their dominant eye is opposite their main hand orientation. As

you get excited and your heart rate increases up to and then beyond 145 beats per minute, your eye-hand coordination with your non-dominant eye decreases. In addition, your ability to do fine and complex motor skills, such as aiming a gun steadily, with your non-dominant eye is greatly reduced. Therefore, you always want to use your dominant eye when shooting.

*Demonstrate how to determine eye dominance. Then have the participants do it as you guide them through the process (**Overhead #9**).*

There are many ways of determining the dominant eye. Research shows that the following method works best with the majority of people.

1. Pick out a distant object and look at it with both eyes open.
2. Extend one arm in front of your body, with the thumb pointed straight up, and cover the object with the thumb.
3. While continuing to look at the distant object, close one eye at a time. Determine which eye continues to see the thumb covering the object.
4. This is your dominant eye.

If you forget these steps, they are part of Activity #10 in your participant handbook.

Instructors should check to make sure that everyone understands how to do this exercise correctly. Eye dominance can also be determined by pointing one's index finger at the nose of a partner who is about 15 feet away. The partner will be able to see that the tip of the index finger is lined up with the dominant eye. This is a very effective way to have doubting parents determine for themselves that their child may be left-eye dominant. Then, combined with the heart rate information, the parent may now support his or her child shooting with the left eye.

As they're doing this exercise, about one in 25 shooters will realize that they need to change from right- to left-hand or left- to right-hand shooting because they have discovered that their dominant eye is opposite the eye they have traditionally used. Answer specific questions about this during the break or after the clinic. Guidance to help you answer these questions is given in Appendix 5.

Remember which eye is your dominant eye. You will use your dominant eye to line up the gun's sight(s) on the target. You will also bring the gun stock to the same side shoulder as your dominant eye when you shoot. This is called your **shooting shoulder**.

Once you have determined your dominant eye, go to **Activity #10** and record your dominant hand and eye information in your handbook.

C. Noise

There is some noise associated with firing an air rifle. I will demonstrate it twice so that you are familiar with it.

First, I will check to see that the air rifle is unloaded. (*Pellet cylinder removed from the Crosman Model 1077.*)

Next, since I am not shooting a pellet, I have to create back pressure by holding the muzzle tightly against a piece of cardboard on the floor. Otherwise I could damage the air compression chamber or plunger in the gun.

Now, I am going to fire the gun. I will now fire the gun. *Fire the gun and then do this sequence a second time to help them become accustomed to the noise.*

D. The gun's sight

We are using a red dot sight such as the one I have in my hand (*not on the rifle*). It is battery operated, so I will turn it on. You look through it from “this end” and you will see a red dot. Hold it up and look through the tube. When you're shooting, keep your eye about two inches away from the sight and keep the dot about in the center of the glass area. The pellet will go where the red dot is when the gun is shot. Pass the sight around for them to see.

This is not a laser—it does not project a light to the target. Rather, it uses a reflected red dot on the lens. We use this type of sight because even people with sight problems can use it. We also use it because we have limited time during this “beginners” clinic to teach about using other types of sights. The red dot sight is not a commonly used sight.

E. The process of shooting

Shooting is a multi-staged process, with many different elements. Each element will influence whether or not you hit the target. When you put all the elements together correctly, the bullet will hit where you aimed. While the process is simple, there is much more to shooting a gun than just pulling the trigger. You will feel a sense of accomplishment as you improve your new skills.

The elements of shooting are important no matter what type of gun you shoot or what type of sight you use. The elements of shooting are: (**Overhead #10**).

Position
Sight alignment
Sight picture
Trigger control
Breathing
Follow through

The elements are explained and practiced in the DNR Firearms Safety program. I will give

you information on this program later. I will now briefly discuss and then demonstrate each of the elements of shooting as it relates to the gun you will be using at this clinic.

Position

When shooting a rifle, there are four common shooting positions: **prone**, **standing**, **kneeling**, and **sitting**. We will be using the sitting position. This is one of the most stable shooting positions. In addition, we will shoot from a table and use a forearm rest. You will sit at about a 45-degree angle and with your shooting shoulder farthest from the table. You then will pick up the gun by the stock's grip while keeping your finger away from the trigger.

There are several types of metal sights (*post, aperture, and notch*), peep, iron, scope, and the red dot sight. By using a good supported position, it is easy to maintain good **sight alignment** and to have a proper **sight picture**.

Sight alignment

Means your dominant eye is lined up with the front and rear sights and the front and rear sights are lined up properly with each other and the target. This is very simple with a red dot sight since you only have to keep the red dot approximately in the **center of the glass window**.

Sight picture

The relationship between the sight alignment and the target. The sight picture varies with each type of sight. The sight picture for the red dot sight includes: keeping the red dot approximately in the center of the glass window and putting the red dot on the part of the target you wish to hit. The forearm rest (*show*) will help you maintain proper sight picture.

The red dot sight is the easiest to use for novice shooters. Using it allows them to concentrate more on other principles of shooting that are also important factors in whether or not they hit the target. *If open sights were used, they would have to learn to focus on the front sight and have the rear sight less sharply focused and the target fuzzy. We want this first-time shooting experience to be easy and fun. The red dot sight helps accomplish this.*

With most sights, your cheek would rest against the gun's stock. However, the red dot sight is too high for this to happen with this gun. *(Nonetheless, you can build up the stock's comb. The final comb should be parallel with, but about 1-5/8-inches below the line of sight. For a Crosman 1077, cut a piece of 1-1/4-inch thick Styrofoam to 9-1/2-inches long. Taper the strip from 2-1/2-inches wide at one end to 1-1/2-inches wide at the opposite end. Use a rasp to create a 1/4-inch deep groove lengthwise on one of the 1-1/4-inch thick edges. This concave groove will fit onto the current comb. Round the other edge by cutting a 1/4-inch triangle strip off of each edge. Now duct tape this piece to the stock's comb with the 2-1/2-inch end at the butt plate end.*

Cover all of the Styrofoam with duct tape.)

Trigger control

Includes how and where you place your finger on the trigger, and how you pull the trigger. When you are ready to shoot, push the safety off and then move your finger onto the trigger. The trigger should be about **halfway between the tip and the first joint** of your index finger. As you prepare to begin pulling the trigger, you will need to control your breathing.

Breathing

Proper breathing will allow you to hold the correct sight picture. To breathe, take a deep breath and let it out. Then take a second or third deep breath, but this time let only about half of it out. Hold the rest of that breath and squeeze the trigger by **applying smooth and continuous backwards pressure** on the trigger. If you have to hold your breath for more than 3-6 seconds, you will start to deprive your muscles and, more importantly, your eye of oxygen. If you cannot shoot within 3-6 seconds, go through the breathing sequence again.

Follow through

The last step is follow through. This means that you continue to look through the sight for a second or two after the gun has fired. Only then do you pull your cheek away from the stock to see if you hit the target. Generally with the targets we are using, you will be able to see if you hit the target as you continue to look through the red dot sight.

Putting all of these elements together results in accurate shooting. When you shoot, don't worry how close you came to the center of the bull's eye; rather, try to aim at the exact same spot each time. This will cause the pellet holes to be close together. Closeness of pellet holes is what you are trying to accomplish. You would just need to adjust the sight to make it hit the bull's eye. This is because each person holds the gun a little differently.

Instructor's note: Select a volunteer who has never shot before. (It's helpful to preselect this person before the clinic starts.) Show everyone that the gun is unloaded and have the volunteer check it. Use the volunteer to demonstrate the procedure for shooting from a sitting shooting position (while sitting at a table and using a forearm rest.) Describe the procedure for the class as you guide the volunteer through the process.

Now our volunteer demonstrator will show you how all of this works together, using the position we will use later at the range.

Show **Overheads #11 and #12**. Remind them that the steps are listed in their participant handbook.

To shoot you will:

Position yourself.

! Sit at the table facing the target at about a 45-degree angle with your dominant eye and shooting shoulder farthest from the table. The gun should naturally point towards the target. You may have to adjust the angle of your body from the 45-degree angle to make this happen.

Pick up the gun.

! **When your coach tells you**, pick up the gun by the stock grip with your **shooting hand** (dominant eye side hand.) Keep your finger away from the trigger—keep it alongside the receiver. Your other hand will hold the forearm of the gun. Remember, the gun is **already loaded**.

! Place the **stock against your shooting shoulder** (dominant eye side shoulder) and put the gun barrel on the forearm rest at the proper height.

Establish proper sight alignment and sight picture.

Aim

! **Aim with your dominant eye** by looking through the red dot sight. Keep the red dot approximately in the center of the glass window and place the red dot on the target. Your cheek should be against the stock. *(The red dot sight sits very high and for many people they will not be able to have their cheek against the stock. This is OK for this clinic—let them know this. You may build up the stock comb with dense Styrofoam and duct tape, as mentioned earlier.)*

Trigger control.

! Push the **safety off**.

! Place your **index finger on the trigger**. The trigger should be about **halfway between** the tip and the first joint of your index finger.

Tell the volunteer not to do the following steps until you have explained them. Then have the volunteer demonstrate each step.

Breathing.

! Take a deep **breath**, let it out. Take a second deep breath and let it part way out. While holding the remaining breath, squeeze the trigger.

! **Squeeze** the trigger by applying smooth and continuous backwards pressure on the trigger. Keep the red dot on the target and continue holding your breath.

Follow through.

! Continue holding the gun sight on target for a second or so after the shot has been fired. This is called **follow through**.

F. Activities at the range

We will soon be going to the range. You will have 40 minutes to shoot an airgun and observe or participate in several activities. They are:

- picking up, holding, putting the safety on, and carrying a gun
- setting up an indoor airgun range
- look-alike guns and selecting equipment
- safe storage of guns

Parents or guardians must accompany their youth throughout these activities. The class will be divided into two groups. Both groups will be together for some initial instruction at the airgun range, and then half of the group will go to the other activity station where they will: practice carrying a gun, (*that is, picking up, holding, and putting the safety on*), learn how to set up an indoor airgun range, see some airguns that look like real guns, learn about selecting equipment, and safe storage of guns. Later the groups will switch activities. Take your participant handbook with you for reference on the shooting procedure.

It is very important that all the participants shoot an airgun during this clinic. This shooting opportunity was especially designed for beginners. As you experience the actual shooting of a gun, you will better understand gun safety and operation. We also want those who have shot a lot to experience this teaching method so they will better be able to help other beginners.

We will be using paper targets so you will have a “trophy” to take home.

While you are shooting, there is one range command which all participants need to know—that is, “**Cease**.” It is a range safety command. **Anyone** may say the command if they see an unsafe situation. If you hear it, you should immediately stop shooting, put the gun’s safety on, and lay the gun down on the table. We will practice this once when we are at the range.

Now write this range safety command (cease) in your manual at **Activity #11**.

At the range, keep your **eye protection** on from the time it is given to you until it is collected.. You will also need to **stay behind the shooting line**. Do not talk with or bother anyone who is shooting.

In 10 minutes, we will all meet in the gymnasium (*or wherever*) at the range. This travel time also includes some time to use the restrooms and get a drink of water.

VI. Range Activities (often in the school gym)

See Appendix 2: Setting up the shooting range. (Have everyone gather near the airgun

range.)

After some initial instructions, half of the class will remain here and the other half will go to Activity Station 2. *(Point to where the station is located.)* We will then tell you when to switch activity locations.

Everyone needs to wear safety glasses until we collect them. Please put your safety glasses on now. If you are wearing eyeglasses, you do not need the safety glasses.

There will be two lines to shoot the airguns. *(Three lines if using three guns.)* Each person will get three shots.

Again, here is where the safety is found on the gun. *(Show the gun's safety.)*

The gun will already be loaded, so keep your finger alongside the receiver until you are ready to shoot.

Remember, anyone may say the **“cease”** command if you see a dangerous situation.

Remember which are your dominant eye and shooting shoulder.

Now watch as the first two shooters take their positions and, when I tell them, they can begin shooting. Everyone except the shooters should stay behind the shooting line which is... *(point this out)*. Advise everyone that **“the range is now open.”**

*Say what the shooters are doing as they do it...position, pick up gun, sight alignment...at this point **do a “cease” practice exercise.***

Cease

Remind everyone that at this command they are to stop shooting, put the gun safety on, and place the gun on the table.

We have just practiced the safety command, “cease.” This is the only time we will practice it. From now on if you hear the command, it will be for real.

The range is open, we will continue shooting.

Then continue...position, pick up gun, sight alignment, sight picture, breathing, trigger control, and follow through for a total of three shots.

Put the safety on and lay the gun back down. When both shooters are done, I will have you replace the targets. You may keep your target. If this is your first time shooting, an instructor will sign and date the target. You then got to the instructor where you practice handling a gun.

Many shooters prize their target. The instructor should sign and date the target and, for first-time shooters, note on it their name, date, and that this was their first three (or however many) shots. Frequently, the first-time shooter will keep it as a “trophy” and show it to friends and relatives, explaining what a great time their first shooting experience was and also reiterating some of the safety information they learned. This is an excellent way to reinforce the principles they have just learned and also to spread the safety message to many people who otherwise would not hear it. It is also a great way to get participants for your next clinic.

Half of the class should do the activities at this station—the rest should go to Activity Station 2. Your instructor will announce (after about 15 minutes) when it is time to switch to the other activity station.

ACTIVITY STATION 1: Shooting the airgun and handling a gun

Part A. Shooting the airgun

Instructor’s note: Adult women who have never shot before may be a little hesitant about shooting and may have even come with the idea that they are here just to observe their youth. However, with a little persuasion, they find the experience very rewarding and enjoyable. Often they will say, “I can’t wait to show this target to my sister.” or “I’m going to put this in my diary.” See “Encouraging Reluctant Shooters” in Appendix 7.

The Shoot-N-C® targets offer “instant” reward to the first-time shooter. Using the forearm rest and red dot sights also result in greater success in hitting the bull’s eye.

*Instructors should practice loading and shooting the guns before the participants arrive for the clinic. Also, make sure that the guns are sighted in for the distance they will be shooting. The red dot sight has a lot of parallax. You will also see that the point of impact may vary an inch or more between shooters. Emphasize that a **compact group is what counts**—not where they hit on the target as the gun is not sighted in for them specifically.*

Shooters can count three, maybe four shots. More than that is confusing and takes too long to give everyone an opportunity to shoot. It is important that everyone shoots...even the very experienced. If you have time, you may want to give them four shots, but three is preferred.

*This station will require one coach for each gun as well as an overall **safety person** and a person who will clean safety glasses, load pellet clips, etc. The safety person must be a certified AHE, MBEP, or FAS instructor. An additional person is also needed to teach “handling a gun” to those waiting to shoot or who are done shooting.*

The shooting glasses will need to be disinfected before the next use. Four 5-quart ice cream buckets will work for this. One contains the clean glasses; the second contains a disinfectant solution (any type of antibacterial soap); the third is a clear water rinse; and the fourth is a place to let the glasses drip before being dried with a paper towel. Once the glasses are disinfected and dried, put them into the first bucket again.

The following is a condensed version of the steps described above.

- 1. Issue safety glasses to everyone; have them put the glasses on and keep them on until told to take them off.*
- 2. Review safety and range rules/commands.*
- 3. Review how to shoot with the rifle they will be using.*
- 4. Have them sit properly at the table.*
- 5. Advise them that, at the table, the gun is already loaded.*
- 6. After being told to do so, pick up the loaded gun with your shooting hand, keeping your finger alongside the receiver—but not on the trigger.*
- 7. Place stock against shoulder.*
- 8. Aim.*
- 9. Push safety off.*
- 10. Place index finger correctly on trigger.*
- 11. Take a breath and let it partly out.*
- 12. Squeeze trigger—straight back and with steady pressure.*
- 13. Follow through and then shoot twice more. The instructor will then put the safety on.*
- 14. Lay the gun down.*
- 15. Replace and retrieve your target when commanded to do so. If you have never shot before, the instructor will sign and date your target.*

Be sure that everyone has had an opportunity to shoot. You may have to use a little persuasion with a few individuals. Nearly 100 percent will shoot with a little encouragement, especially after seeing the positive reactions from others.

ACTIVITY STATION 1

Part B. Handling a gun

Instructor's note: It is best if you can use a powder-burning firearm for this station. Remember to have red ribbons tied on each gun near the muzzle.

Each person should practice picking up, holding, putting safeties on, and properly carrying several airguns after I demonstrate how to do this. Here is how you pick up a rifle, shotgun, handgun. (*Show how for each gun.*) Touch here. (*Show grip area and forearm.*) Don't touch here (*trigger, trigger guard, muzzle area, etc.*). Watch muzzle control. Pick up a gun from the floor, table, etc. Then carry the gun over to the instructor and return it to where it came from.

Gun safeties

Show several types and locations of safeties. Point out that some airguns have safeties which automatically go on. Most Marksman brand airguns do so.

Actions

This is also an opportunity for people to see various types of loading mechanisms, magazines, and actions. An instructor can show how several types of actions work, but participants shouldn't try operating them. This is beyond the scope of this clinic. Suggest that they take the Firearms Safety course if they want more information and practice.

ACTIVITY STATION 2

Part A. Setting up an indoor airgun range

Instructor's note: Adults should accompany youth at this station. Comments should be addressed to the adults because some of this information may be too complicated for youth to fully comprehend.

Set up an indoor range display as described in the Participant Handbook. Show participants the display and explain how to construct the primary backstop (cardboard box with magazines and newspapers) and secondary backstop (carpet loosely hung over a frame to prevent ricochets with a piece of plywood placed behind the carpet to prevent pellets from penetrating the wall). Also point out the section covering how to set up a home airgun range in the Participant Handbook.

This display is built like the one recommended in the Participant Handbook.

An indoor range provides an opportunity to practice and teach basic gun handling safety and familiarization at home. Fifteen to 25 feet in a home will work. More distance between the backstop and firing line is desirable, but the basics along with a lot of wholesome family fun and safety education can be accomplished even in a small amount of space indoors. Most people use the basement, but an indoor range can also be set up in a living room. Be sure that you can control pets and keep people from accidentally wandering into the shooting area when it's in use.

Adults should always supervise range activities. Note the laws in your participant handbook. We will talk more about the laws later in the clinic. Everyone should wear safety glasses. Good lighting surrounding the shooter and target is very helpful.

This is an opportunity to increase family time together. The majority of young competition shooters have a sibling who also shoots on a regular basis or who is on a team.



At this display, you can also show a biathlon training airgun and tell them that there are both winter ski and summer bicycle/running biathlon events.

If you have them, you can show posters and photos of the women and men Olympic gold medal winners in biathlon. You can tell them that there is an NRA Marksmanship Qualification Program. This is a “self-administered”

program. Advise them that more information on this program is available from the National Rifle Association.

Part B. “Look-a-likes” and selecting equipment

Instructors may be able to gather these items from other team members to make a display or some are available at reduced prices (see details immediately following the end of this clinic outline).

Some airguns can very easily be mistaken for a powder-burning gun. Law enforcement officers respond to them as if they were a powder-burning gun. Several examples are the Crosman 970BL Black Lightning rifle, which looks like a shotgun; the Crosman 357 GT handgun, which looks like a common .357 revolver; and the Crosman 1008, which looks like a semi-automatic handgun.

We have a display of different airguns, targets, and projectiles that airgun shooters use. You may ask me questions about selecting airgun equipment. There are various types of airguns—recreational, hunting, and competition. Several of these airguns are in the \$25-75 price range. They are powered by compressing air, CO₂, or a spring. Note also the various types of sights—peep, iron, scope.

The following may help you answer some of their questions. If a particular question arises several times, you may want to mention the answer again in the classroom as others may also want to know that answer.

Basic stock size: Beginning air rifle stocks can be sawed off to size and then use some duct tape or Shoe Goo to smooth the joint. Show how to determine proper gun stock length by measuring between the elbow crease and trigger finger crease. See *Footnote #3 of Appendix 5*.

Velocity: 300-500 fps (feet per second) pellet speed is fast enough for accurate shooting and also increases the safety factor. Some airguns are made with velocities which exceed

the speed of sound.

Physical strength and ability needed to cock or pump an airgun or to pull the trigger: This varies a lot between models. Bolt action or break barrel actions cause the person to practice muzzle control as they load the gun, and tends to emphasize quality rather than quantity of shots taken. Pressure needed to pull various triggers can vary from several ounces to about 10 pounds. This can be adjusted on some airguns. Also, a wide variety of modifications can be made for various physical disabilities. For example, a person may not be able to use their arms or hands, yet shoot with the use of a rest and a device which will pull the trigger when they blow into a tube.

CO₂ cartridges: Good for about 40 shots but may have to be used within several days' time as the CO₂ may leak out in some guns. This is not a problem with most of today's airguns.

Paper and motion targets: There are several brands of paper targets which change color when hit. Spinning, swinging, and fall-down targets are available and can also be made. Aluminum pop cans are popular to use out-of-doors. Indoors, it is best to use a cardboard box filled with crumpled newspaper and magazines as pellets striking metal increase the possibility of a ricochet and may emit harmful lead particles into the air.

Airgun projectiles: BBs versus pellets and several styles of pellets. Caution them to use the correct projectile for the gun. Point out the different calibers and types of pellets display. Caution: using BBs in some rifled barrels may cause damage. Lead pellets are softer and work with the barrel rifling. Some people use an ink pen point to "seat" the pellet to the same depth each time with a break barrel action rifle. This causes the pellet to start at the same point on the rifling each time and tends to increase consistency.

Airgun lubricant (generally acid-free and silicone based): Do not use low-flashpoint lubricants in your air rifle as they can cause damage to the gun's working parts. Firing temperatures may reach 2,000 degrees F.

Sights: Some red dot sights have both a low and high setting. Scopes must be designed for airguns. Regular high-power rifle scopes will not withstand the shock associated with an airgun being fired. *Note information on this in Appendix 6. A peep sight, open sights, and non-battery, glowing, fiber optic sight can also be shown, if available.*

Equipment costs: Approximately **\$50 will get them started**. Pellet gun with a rifled barrel (can be purchased on sale for about \$35), shooting glasses, (\$2-5), maybe a red dot sight (\$14-16), 500 pellets (\$3-9). Targets and backstop can be homemade.

Part C. Safe gun storage

This includes safe gun storage devices, locks, and gun cases. Instructors provide as available. A number of instructors may be able to consolidate their items to make a nice

display.

Suggest that some of these items will make good presents for family members and friends.

Considerations of how you store guns in your home include:

- who has or needs access:
 - Youth should handle guns only with adult supervision.
 - Guns should be accessible only to authorized people.
- security use of the guns:
 - A Florida State University study shows that U.S. homeowners use guns up to 2.4 million times a year for protection. The U.S. Census Bureau's annual National Crime Victimization Survey reports that an estimated 80,000 civilian injuries and lives are spared annually because of gun protection.
- types of storage facilities or equipment you have:
 - Projectiles should be stored separately from the guns and also in a locked area. A locking file cabinet or drawer is an economical option and one a babysitter should keep in mind.
 - The bolt from a bolt action gun and any removable magazines should be stored separately.

There are various types of locking storage devices: gun racks, cabinets, various types of cases, and safes.

There are a variety of gun locking devices which make the individual gun inoperable. Some go through the gun's action; others lock the trigger. There are many other types of these devices on the market. You may want to look at them at several different types of stores.

If a family member or frequent visitor is **addicted to alcohol or drugs or is violent or mentally ill**, then guns in the home create a high and unnecessary risk. Guns should not be present or extra storage precaution should be taken.

Check your attic, garage, etc., for that ".22 rifle" which was put there 30 years ago so exploring children don't find it.

Displayed antique guns should have some part of the firing mechanism removed. This can be done by a gunsmith without any permanent or noticeable change in the appearance of the gun.

This ends the activities in the gym.

Turn in safety glasses.

RETURN TO THE CLASSROOM.

Refocus participants by showing the remainder of Gun Safety Begins at Home (3 minutes in length).

Besides learning about gun safety, there are many other reasons to learn to shoot as shown in your participant handbook.

If you are unfamiliar with guns and want to learn more, you should attend the DNR Firearms Safety class. Anyone 11 years old or older may take this course. Take a look at the Hunting the Right Way brochure. *Show the age requirements, telephone number to find out where classes are going to be held, and how to get a duplicate FAS certificate. Using the handout, point to each of the panels that describe the FAS, AHE, and MBEP programs as you briefly talk about each of them.*

Credit toward advanced hunter education certificate

To receive your advanced hunter education certificate, you will need to complete four additional clinics of your choice, selecting from map and compass, white-tailed deer, moose, turkey, bear, and waterfowl. You will also need to pass a written test. This certificate allows people born after 1948 to be able to purchase hunting licenses in other states.

VII. What to do if a young child, such as a 3-year old, suddenly appears with a gun

The key is prevention. Babysitters should make sure they ask the questions given at the beginning of this clinic. They are... (turn to page 3 of the Participant's Handbook).

(Show Overhead #13.) Babysitters who find a gun that is not locked up should:

- Remove the children from that area and lock that area.
- If this is not possible, they should move the gun or call an adult who can move the gun to a safe location.

Parents, discuss this with your children and babysitters before they come upon this type of a situation.

What if a 3-year old child were to suddenly appear with a gun in hand. What would you do? *(Discuss.)*

(Show Overhead #14) The babysitter may be able to **distract the child** by pointing to the side, but slightly behind them (point to the side where the gun's muzzle is pointed or toward the direction you want the muzzle to be pointed) and saying, "What is that?" or "Is that Grandma over there?" This usually will cause the child to turn and look in that direction.

They generally will point the gun's muzzle in that general direction also. The possibility also exists that as the child turns, the gun may discharge. When the child's attention is diverted to where you are pointing, you have only a second to carefully take hold of the gun's barrel and control the muzzle. Then ask the child to release his or her grip on the gun and give it to you. Store the gun in a locked area. Advise the parent(s) of the incident.

Now do **Activity #12** in your handbook—**Young child suddenly appears with a gun in hand.**

- A. **Determine** which is the **safest direction** for the child to point the gun.
- B. **Distraction question + pointing:** Point to a location to the safest side and slightly behind the child and ask the question, "What is that?" or "Is that _____ (person such as Grandma)?"
- C. Step forward and **control muzzle**—Walk toward the child, and while keeping the muzzle pointed away from you, take hold of the barrel and control the muzzle direction.
- D. Have **child release grip** on the gun.
- E. **Store gun in a locked area.**
- F. **Advise parent(s)** of incident.

Have two or three participants practice this in small groups. Have instructors observe them.

VIII. Laws

Discuss a few basic laws regarding local town, city, and township ordinances. For the majority of towns in Minnesota, it is only OK to shoot indoors and with adult supervision. About one-third of the larger towns and some of the smaller towns prohibit this, too, so contact your local law enforcement department for specific ordinance information.

Emphasize the laws regarding supervision and permission.

Youth 13 and younger must have **parental or guardian supervision** when using firearms and airguns.

MSA 609.66 Dangerous weapons

Subd. 1a. Misdemeanor and gross misdemeanor crimes. Whoever does any of the following is guilty of a crime and may be sentenced as provided in paragraph (b): (6) outside of a municipality and without the parent's or guardian's consent, furnishes a child under 14 years of age, or as a parent or guardian permits the child to handle or use, outside of the parent's or guardian's presence, a firearm or airgun of any kind, or any ammunition or explosive.

A parent or guardian's permission is required before furnishing an airgun to a person

under 18.

Subbed. 1b. Felony; furnishing to minors. Whoever, in any municipality of this state, furnishes a minor under 18 years of age with a firearm, airgun, ammunition, or explosive without the prior consent of the minor's parent or guardian or of the police department of the municipality is guilty of a felony and may be sentenced to imprisonment for not more than 10 years or to payment of a fine of not more than \$20,000, or both. Possession of written evidence of prior consent signed by the minor's parent or guardian is a complete defense to a charge under this subdivision.

Emphasize the gun storage law. Many people are unaware that this law exists.

MSA 609.666 (See Appendix 4 for a copy of the statute.) Requires proper storage of loaded firearms (reasonable action is taken to secure the firearm against access by the child—child is someone under 18 years old).

“Loaded” means has ammunition in the chamber or magazine, if the magazine is in the firearm, unless the firearm is incapable of being fired by a child who is likely to gain access to the firearm

Transportation of an air rifle or pistol in a motor vehicle, under Minnesota Statutes, is the same as any other gun. It must be unloaded and fully enclosed in a case with the case snapped, zipped, buckled, tied, or otherwise fastened, and without any portion of the gun exposed.

IX. Conclusion of clinic for youth



Disabled shooters

You may know someone with a physical disability. Let them know what you learned about shooting—that it is a skill which people of all physical abilities can develop. Many rehabilitation centers now use shooting to help quadriplegics with mid-torso balance and breathing as well as to help them experience a sense of accomplishment, and much more. It often is one of the first activities that a new quadriplegic person can do. Through this activity

they feel a sense of accomplishment and also see that they can do and even excel at the same things able bodied people do.

Various adaptations make it possible for almost anyone to shoot, including the blind. These include many types of stands and holders, adjustable trigger pull, trigger firing

mechanisms², trigger and sight extensions, carpet tape applied to back of fingernail to pick up pellets, etc. More information can be obtained from the **NRA's Disabled Shooting Services** at 11250 Waples Mill Road, Fairfax, VA 22030 or 703/267-1495.

International shooting competition is available for the physically disabled including paralympics (Olympic-level sports for athletes with a physical disability), Beeman (Marksman) Corporation International competition, and the Can-Am games.

D. Additional training and programs available

Parents should suggest to their youth's teacher that they use the **Eddie Eagle** program in school. The pre-K through sixth grade materials, lesson plans, and video are free to teachers and available in both English and Spanish. Order these materials by calling 1-800-231-0752.

When youth reach age 11, they will be able to attend Firearms Safety classes. Prior to that time, the parents should have had a significant impact on their children's understanding of gun safety. Reiterate the importance of adults talking with and teaching youths how to handle guns safely.

Ongoing shooting programs for youth, generally ages 9-19, include: 4-H Shooting Sports; Jaycees; Minnesota Airgun Field Target Association; Minnesota State Rifle Association; NRA Marksmanship Qualification Program with certificates, medals, pins; Presidential Sports Award for those 15 and older; National Wheel Chair Shooting Federation; Youth Hunter Education Competition; and more.

Various caliber guns and ammunition are available at reduced prices through the Civilian Marksmanship Program, Camp Perry Training Facility, P.O. Box 576, Port Clinton, OH 43452 or by calling 1-888-267-0796.

The Participant Handbook provides additional safe gun handling information in two appendices—one on hunting safety and the other on hunter behavior.

The DNR's general information number is 1-888-MINNDNR (1-888-646-6367). The local number in the Twin Cities metro area is 651/296-6157; Internet web site is www.dnr.state.mn.us.

If you are interested in becoming an instructor, call your local conservation officer who is

² One such homemade mechanism is made from a block of metal which is attached to the trigger guard with a thumb screw. A camera's remote shutter release cable is taped into this block so that the release pin will push the gun's trigger and fire the gun. The bulb end of the shutter release is squeezed by the shooter biting on it, rather than squeezing it with a hand. A similar device fires the gun when the shooter blows into a tube.

_____ (give name and phone number) to receive additional information.

Announce to group the date _____, time _____, and location _____ of the next Introduction to Guns and Gun Safety in the Home clinic. Invite a friend to bring their family to the clinic.

Reemphasize that babysitters should ask the questions on safe storage and have the options of locking a room or calling an adult rather than moving the gun. Remind them to review the material in the Participant Handbook at a later date.

At this time:

You may formally end the clinic by skipping to section XI, or if time permits, you may dismiss the youths to the range and display area where they can practice handling guns and shooting and then cover section X with the adults.

X. Adults only portion of clinic

(The following is beyond the scope of the clinic. This information is provided for the adults only.)

What questions do you have?

Answer their questions by adapting the following items accordingly. If there are no questions on one or more of the sections, then that section(s) may be summarized in a short (couple of minutes) presentation so that all of the following concepts are presented in at least a condensed form.

A. Youth using guns and learning to shoot

Unfortunately, the primary “instructors” for most youth are TV, movies, video games, and peer talk—venues where they are exposed to unsafe gun practices, and more importantly, unrealistic situations.

Parents should **not make a gun an object of curiosity or a forbidden object**. For safety considerations, a child’s curiosity needs to be changed to knowledge and respect. Show as well as tell them what is right. Start with the Eddie Eagle rules learned earlier in this clinic.

Do not force a child to shoot. Let the child see others do it right. This will allow the child time to “think about it” and build a desire to learn to shoot correctly and safely. If a parent provides supervision, encouragement, training, and an opportunity to shoot, the child will shoot when he or she is ready.

Youth five years and older can be taught to safely shoot an airgun with adult supervision. The gun stock will need to be cut down. Also select a gun with an easy trigger pull.

As children desire to shoot a gun, parents should ensure that:

Children know the gun safety rules and how to apply them before they start shooting. They encourage, coach, and supervise children's shooting practice. Adult supervision is important. Parents play a major role in helping their child learn the proper respect, use, and safety associated with a gun. This also builds self-esteem.

As said before, children are five- to seven-years old before they can begin to distinguish between what they see on TV, videos, and video games and what is reality. This emotional maturity should be considered as parents decide when their child should begin to handle guns. A certain degree of physical strength and size must also be attained before they are ready to shoot. Shortening an airgun's stock, using an airgun with an easy trigger pull and a simple-to-use sight will allow for successful shooting at a younger age.

Adjust shooting activity to the youth's physical and emotional maturity. Competitive shooting can begin when youth can safely handle the gun and have a certain degree of physical maturity. Many competitive shooters begin at age 10.

How old should youth be before they can handle a gun without adult supervision? The following may help a parent make this decision since it will vary among youths. Look for all of the following. A youth, with proper gun safety training and certification, may be able to handle a gun without adult supervision when:

1. They show consideration for others and things.
2. They are responsible, that is:
 - able to make decisions based on right and wrong
 - think and act rationally
 - they are accountable for their behavior
3. They show organization, discipline, and control in their life.

Until a child can demonstrate this level of maturity, adult supervision is mandatory. After that, it is up to the parent or guardian to determine when the time is right and to make sure they are in compliance with the local ordinances and laws for the state in which they live.

B. How to make a gun safe

A fundamental part of gun safety is to **know whether a gun is loaded or not**. Simply looking down the barrel from the muzzle end will not tell you if a gun is loaded (see **Activity #13**).

To demonstrate this, you can put a mouse trap in a cardboard box. I am going to hold this box up high enough so you can't see into it, but so you could reach into it. I will have a mouse trap in the box. This box and mouse trap are like a gun. You can't tell if the mouse

trap is loaded or unloaded by just looking at the box. The trap is “loaded” if it is set. A gun is the same way. You need to be able to look at it to know if a gun is loaded or unloaded. Would you want to reach into the box to pick up the mouse trap or would you want me to lower the box so I could show you that it is “loaded” or “unloaded?”

Knowing how to work the action will allow you to see if a gun is loaded or not. If you do not know how a particular action works, do not experiment. Rather, have someone who knows show you.

The DNR Firearms Safety course covers how various gun actions work in detail, but here is a quick overview of how to determine if a gun is loaded or not.

For all guns, **begin by pointing them in a safe direction and keeping your finger outside the trigger guard and alongside the receiver.**

Inspect the gun (look at, but do not move “things” around) to see if you can determine where the safety is and how it works. Put the safety on if you know how to do it on this particular gun.

If you are unfamiliar with this particular type of gun, you may not be able to do the next steps. Determine how to open the action. If you do open the action, leave it open so a cartridge can not “accidentally” move into the firing chamber.

The following methods are used to open the action and unload various guns:

Rifle - bolt action

Remove the magazine if possible, lift bolt upwards (generally) to unlock, slide bolt backwards (may have to do this several times until no more cartridges come out) and visually or mechanically (with your little finger) inspect chamber to see that it is empty.
Show how to mechanically inspect the rifle with their little finger.

Rifle - pump action

Press the release, pull backward on the forearm (may have to do several times until no more cartridges come out) and visually or mechanically inspect the chamber.

Rifle - semi-auto action

Remove the magazine if possible, pull the bolt back (may have to do several times until no more cartridges come out) and lock open if possible. Then visually or mechanically (with your little finger) inspect chamber to see that it is empty.

Rifle - lever action

Push the lever down and forward (may have to do several times until no more cartridges come out), then visually or mechanically inspect the chamber.

Shotgun -Pump action, bolt, and semi-auto are similar to the rifle.

Shotgun -semi-auto Very similar to the rifle.

Shotgun - hinge or break action

Push the release lever (usually on top at the base of the barrel), hinge it open, and manually remove shells if they do not “fly” out.

Handgun - revolver

Release the cylinder release latch and visually check the cylinder. On some, you can check them all at once and on others you can only check one chamber at a time by viewing through the loading gate.

Handgun - semi-automatic

Remove the magazine, hold the gun by its grip and grasp, then pull the slide backwards and lock open if possible. Visually, or with your little finger, check to see that there is no cartridge in the chamber.

Have them practice opening the action on an airgun or powder-burning gun. Semi-auto action and bolt action airguns are common. As a way to help them retain what they have learned, you could have several guns available and after showing them, have them form lines and then have the first person tell and show the second person how to work the action. The second person would then show and tell the third person, etc. This will take a few minutes, but greatly increases the comfort level of handling guns and retention of information learned.

XI. Ending the clinic

If you heard any comments about how someone went from not wanting to shoot to really enjoying it, mention that, but do not point out the individual(s).

Review of the key points outlined in the Participant Handbook, especially the safe handling rules. This handbook is a good reference document.

Suggest that they **share this information** (both the safety and family fun aspects) with others.

Suggest that they **set up an indoor airgun range**. This is the ideal way to teach their children and share the information they have learned with their friends. It's also an activity that they can enjoy year-round in their home.

Tell them to **tell others about the next clinic**. It will be _____ (date),
_____ (location), _____ (time), and
_____ (how to preregister).

Turn to your neighbor and discuss, “What did we learn in this clinic?” and “How am I going to share this information with my family, friends, and neighbors?”.

Thank them for coming.

–The End–

Principal instructor

Within five days of the clinic, please submit your completed roster forms A and B for those participants 12 and older along with the payment to: DNR Enforcement Center, 15011 Highway 115, Little Falls, MN 56345-4173. Also, please let us know how many attendees were 11 years old and younger.

Airgun purchase

Available at a reduced price to non-profit organizations and instructors only. These materials are not available to the general public. The following companies are "carrying a lion's share of the total expense" of these items. Instructor prices may change. These were current as of December 2000.

To order, just send your name, address, telephone number, a copy of your AHE, MBEP, or FAS instructor card, along with the quantity, names, and part numbers of items desired and payment (Visa, Mastercard or a check) to the respective company. Include a statement that you will use the airguns with the Minnesota DNR Introduction to Guns and Gun Safety in the Home clinics and Firearms Safety program.

Crosman EASY Program - 12-page booklet with instructor prices on numerous items. Free shipping. Kits contain 3 safety glasses, 1,000 pellets, 100 targets, and more.

Item	Order	Price
.177 cal. CO ₂ powered semi-auto rifle with 12-shot rotary clip - model 1077	Kit D	\$43.00
.177 cal. Break barrel, spring piston single shot rifle (use in FAS) - model 795	Kit E	\$53.00
CO ₂ powered .177 cal. 6/10-shot pistol. 6" barrel. Like a .357 - model 3576GT	Kit F	\$36.00
CO ₂ powered .177 cal. 8-shot pistol. 4.25" barrel. Semi-auto - model 1008B	Kit G	\$33.00
CO ₂ , .177 cal. Precision competition air rifle - Challenger 2000	Challenger Tgt.rifle	\$195.00
Red Dot Sight	0290RD	\$4.70
Bulk CO ₂ cartridges (60 per box)	60 Bulk CO ₂	\$11.00
Bulk pellets - 72 boxes of 250 pellets each	Bulk7177 pellets	\$40.00

Crosman Corporation, EASY Program, Routes 5 and 20, P.O. Box 308, East Bloomfield, NY 14443

Daisy Manufacturing Company - For shipping charges, call customer service 1-800-643-3458

.177 cal. single pump, peep sight, bolt action - Model 845	845 Air Rifle	\$40
--	---------------	------

.177 cal. single pump, peep sight, bolt action - Model 853 rifle	853 Target Pellet Rifle	\$175
Lazer-Ed - laser emitting rifle with 50 shoot, don't shoot scenarios - VHS	Lazer-Ed	\$30.00
CO ₂ powered precision competition air rifle .177 cal. - model Medalist	Avanti 888	\$217.00
CO ₂ fill adapter for Medalist	Fill adapter	\$ 35.00
Shooting Education and Training Services, Daisy Manufacturing Company, Inc., P.O. Box 220, Rogers, AR 72757-0220		

Marksman Products

.177 cal. Break barrel, spring piston Biathlon Trainer rifle - model 1790	1790	\$44.00
.177 cal. Break barrel, spring piston Biathlon Trainer rifle, no stock hook - mdl1791	1791	\$50.00
.177 cal. Break barrel, spring piston rifle. 1000 fps with Rekord trigger - model R9	1039	\$198.00
.20 cal. Break barrel, spring piston rifle. 900 fps with Rekort trigger - model R9	103920	\$198.00
Marksman Products, 5482 Argosy Drive, Huntington Beach, CA 92649		

Appendix 1

Author Donald Slinger

Contributors Dick Anderson, Roger Grosslein, Jim Hatlevig, Paul Rice, Doug Sandstrom, Jeff Thielen, and Enforcement Education Staff.

Time Two hours and thirty minutes (approximately).

Instructors Conservation officer and volunteer AHE, FAS, and MBEP instructors. Helpers as approved by instructors. A minimum of one certified instructor and four helpers are needed.

Participants Anyone eight years and older (youth accompanied by parent or guardian) may participate. Total number of participants is limited to 25.

Cost \$5 (plus up to \$5 optional fee at instructor's discretion) per participant age 12 and older. Free for those younger and all DNR certified instructors.

Advertisement Advertisement by word-of-mouth will probably be the most effective. To optimize this effort, it is recommended that you set up a series of two clinics about three weeks apart. Do not announce the second clinic until after the participants have shot at the first clinic. At that point, they will be excited and want to tell others about the benefits of coming to the next clinic. In some localities, you may want to do a series of three clinics if the demand is great.

Emphasize that even if they don't have a gun in their home, the majority of homes have guns in them and, therefore, everyone should know the basics of gun handling and storage.

Appendix 2

Setting up of the shooting range

Setting up of the shooting lanes: Use two shooting lanes, shooting at the same time, if you have a 6-8 foot table. Three work well with 10 feet of table space. (Three shooting lanes requires one more volunteer.)

See the Participant Handbook section on “Setting Up A Home Airgun Range” for guidance on setting up the shooting area. It will consist of:

Secondary backstop:

a sheet of at least 3/8-inch plywood, which can lean against a wall.

a frame with loosely hung floor carpeting on it placed in front of the plywood.

Primary backstop:

- cardboard box, about a foot high (the target holding box will sit on this box). This elevates the target so it is in better alignment with the muzzle. It also reduces the shots that may otherwise hit the carpeting on the floor.
- cardboard box to hold targets which also contains loosely wadded paper, newspaper, etc., placed inside as shown in the Participant Handbook.

Targets are 8-1/2" x 11" typing paper with a 3-inch Shoot-N-C® target in the center.

Targets are attached to the cardboard box using a push pin. Photocopy the following information onto the typing paper before attaching the targets:

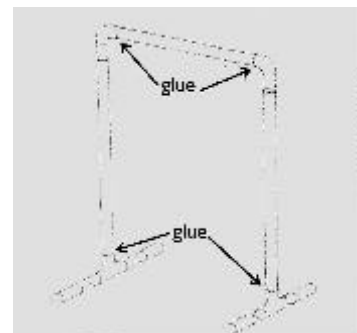
At top have event name

in a box, directly below the event name, have: Store guns and ammunition separately and in locked areas.

About seven inches down make another box, using the left third of the paper, and have the following in that box: Were you born after 1948? You may need a certificate before you can hunt in other states. You need a certificate to hunt in Minnesota if you were born after December 31, 1979. Take the Firearms Safety (651/296-4819) and Advanced hunter Education (651/296-5015) courses.

In the right 2/3 of this lower portion of the paper put the following: Keep your finger outside the trigger guard and along side the receiver. A. Treat each gun as if it were loaded. Load it only when you are ready to shoot. B. Always keep the muzzle pointed in a safe direction. C. Be sure of your target and what is beyond. For Minnesota DNR information, call 1-888-MINNDNR

Backstop carpet holding frame is made of two 2-inch PVC pipe or 2 x 4s. (To make from PVC, use two 10 foot pieces of 2-inch pipe, two 90-degree angles, and two T's. Cut two 4-foot, one 7-foot 8-inch, and four 1-foot pieces. Assemble with T and 1-foot pieces on floor; add a 4-foot upright with 90-degree angle holding the 7-foot 8-inch cross-member. For ease of



transportation, you can cut the 7-foot 8-inch piece in half and use a connector ring in combination with a “shaved down” 2" x 4" x 2' to hold the two pieces together. Also, do not glue any of the ends of the two 4-foot uprights, rather glue the two 90-degree angles to the cross-arm.)

It is important that the carpet is loosely hung in order to stop the pellets. Carpet should be long enough so that it lies on the floor, goes up and over the hanger, and reaches the floor again. A second piece of carpeting should be hung over the first piece. This second piece needs only to be on one side. A piece of ½-inch plywood is placed between the carpet and wall.

The **tables, from which participants will shoot**, should be about 20 feet away from the targets. Cover the table top with a strip of carpeting. Lay a 2" x 6" board along the table's edge, away from the shooter. #6 screw eyes are in this 2" x 6" to which the gun's muzzle end is connected by using a muzzle strap around the barrel, hooked to a chain and ending with a snap. The snap is snapped into one of these eye bolts so that the airgun can only be pointed down range.

A 3/8-inch utility spring snap (the easiest to attach has a swivel and a connector which squeezes together to connect to the chain) is attached to 18-20 inches of 35# window sash chain and this is attached to the gun's barrel near the muzzle (with a muzzle strap).

Making a muzzle strap



A strap, 1" x 4", which goes around the barrel and holds the chain, can be cut from a piece of vinyl or leather or plastic quart-size oil container. Place this strap around the barrel and mark where the bolt holes should be drilled. Drill 5/32 or 11/16 holes in the strap. Then place it around the barrel, insert a 1-inch x 8-32 machine screw (bolt) on which there is a 3/16-inch washer, through both holes, add a second washer and tighten with an 8-32 nut. Place the chain link on

the machine screw and tighten on with a second washer and nut.

A less complicated muzzle strap can be made from a 30-inch piece of 1/8-inch braided nylon cord or even #18 braided mason's line. Tie one end to the snap and use a slip knot to tie the other end to the barrel. You can even eliminate the snap and just tie the cord to the screw eye.

Using a forearm rest

A forearm rest should be used by each shooter. We want everyone to hit the target and have a “successful” first experience. The rest can be from a 12-inch wide piece of 2" x 6", a 12-foot long 2" x 2", and a piece of ½-inch plywood with a “side view of four steps” starting at 3 inches and going up to 9 inches. You may want to make each step “U” shaped to help hold the forearm or barrel better. You can cut two backs from a 12" x 16" piece of plywood. To assemble, sandwich the plywood between the two



pieces of 2-inch material. Attach with Sheetrock screws. Sand bags could also work, but they don't provide as rapid an adjustment for each shooter.

To decrease the time it takes for participants to shoot and reduce the number of steps involved with loading the gun, it is recommended that a CO₂ propelled pellet rifle with an eight or more automatic load clip be used. This allows the shooter to take their three to four shots without removing the gun from their shoulder. They won't have to dismount the gun after each shot to cock the rifle. Rather, they can rapidly regain a proper sight picture and shoot again. Otherwise they will need more time to reload or pump the air rifle, resoulder, and resight. This takes extra time, and the pumping increases the need for muzzle control and makes the shooting process more complicated for beginners.

It is also recommended that you use a **red dot type sight** so beginners can be successful without the complication of learning how to use other types of sights. If there is a high and low setting for the red dot sight, the low setting seems to work best indoors. Red dot sights may not work well out-of-doors.

Red dot sights are very easy to sight in. Use a table and forearm rest. Shoot the gun once. Then, using one hand, carefully hold the red dot on the center of the target and hold the gun steady, using the rest and table. Now, using the sight's two adjustment screws, take a screwdriver in the other hand and turn the screws so that the red dot moves from the center of the target to the center of the hole that was just shot. The correction has then been made. Refire the gun to see if any additional fine adjustment is necessary. For fine adjustment, adjust by looking at how much you turn the screws, rather than trying to get the red dot to move the correct amount. Several tries and you should have it. Again, recall that the red dot sights have a lot of parallax and, therefore, the point of impact may vary an inch or more between shooters. It is group size rather than location on the target that they are trying to achieve.

If you are using a Crosman 1077 rifle and red dot sight. Make sure that you read the instruction book on how to load the pellets, clips, magazine, unjam a pellet, and replace the CO₂ cartridge. A drop of oil on the threads of the bolt, which holds the CO₂ cartridge, will make it easier to tighten and ensure that it does not leak. This seems to work best indoors. Other brands may or may not have a low setting. Make sure the red dot sight is turned off when you are done shooting at the clinic.

Ranges

Often a room or portion of a gymnasium is used. A safety person controls when a person may cross over the firing line and spectators are kept at a distance behind the firing line. Occasionally a setting requires a barrier (panel range) to control ricocheted pellets from the side.

Panel ranges

Several organizations have made moveable barriers in the form of panels which are approximately 3' x 8' and are either plexiglass or plywood. A set might consist of 10 panels

each. Panels are 26" x 63". Panel frames are made by cutting a 1" x 8" into four equally wide strips and then grooving the strips so either a piece of Lauan plywood or Lexon fits into them before assembling. These are lightweight and small enough to fit in most vehicles. The panels latch together.

Tube ranges

Some have used 8 to 18-inch diameter CFM tubes. This material is similar but lighter in weight than Schedule 40 PVC pipe. Ricochets are controlled from all directions using a tube, but muzzle blast noise is confined and, therefore, seemingly amplified. Also we find that many first time shooters show greater reluctance to shoot an airgun in a tube range. This is a serious drawback. At "shooting only" events, the 8-inch tube also prevents using a target retriever so a person must walk down and replace/retrieve the target for each shooter. A 16-inch square tunnel, made from 1/4-inch paneling seems to be more acceptable.

Target retrievers

These are necessary only at some "shooting only" events such as a fair. Using target retrievers allows target retrieval without shutting down the firing line. Commercial retrievers are available from \$150-500 each. Homemade retrievers are described in Appendix 9.

Appendix 3

Clinic items

I. Ordered from DNR Education Center at Camp Ripley (for 25 participants):

Handouts (in lots of 25 each)

Name tags

Hunting the Right Way brochure

Participant Handbook

Expendables

Fifteen sheets with two each Shoot-N-C® targets

One-half box of pellets (approximately 125)

Optional request from DNR Education Center at Camp Ripley:

CD of the Introduction to Guns and Gun Safety in the Home clinic for instructor use.

Order videos from the DNR Film Library:

855 Learn Gun Safety with Eddie Eagle video

854 Firearm Safety Begins at Home

II. You will need to assemble your own materials gathered from your instructors or purchased. A suggested set of materials might include:

Guns

One Marksman 1790

Two Crosman 1077 with safety chains

One 3576gt revolver

One 1008B semi-automatic handgun

Several other airguns for use at activities A, B, and D

Gun accessories

One tube pellgun oil

Two Crosman 1077 magazines

Twelve 1077 rotary cylinders

Three 10-shot rotary cylinders for 357

Three 6-shot rotary cylinders for 1008

One cleaning (unjamming) rod, gun cases

Shooting accessories

Two multilevel rests

Three red dot sights

One extra red dot sight battery (Duracell #DL2032, or CR2032)

#2 phillips screwdriver

2" x 6" board with two safety chain eye hooks

Other

Crosman 0444 swinging

Pellet display

Pellet penetration display

Dummy ammunition (12- and 20-gauge, .308 rifle, and handgun)

Ten push pins to hold target

Thirty pair safety glasses

III.

Items you need to provide - as available

Target holding box - primary backstop

Secondary backstop

video player

extension cord

TV monitor

If using the CD version of this clinic, you will want a laptop computer, video projector, and screen. This may be available to borrow from your Conservation Officer.

Appendix 4

Laws

Minn. Stat. §609.666 Negligent storage of firearms

Subd. 1. Definitions. For purposes of this section, the following words have the meanings given.

(a) “Firearm” means a device designed to be used as a weapon, from which is expelled a projectile by the force of any explosion or force of combustion.

(b) “Child” means a person under the age of 18 years.

(c) “Loaded” means the firearm has ammunition in the chamber or magazine, if the magazine is in the firearm, unless the firearm is incapable of being fired by a child who is likely to gain access to the firearm.

Subd. 2. Access to firearms. A person is guilty of a gross misdemeanor who negligently stores or leaves a loaded firearm in a location where the person knows, or reasonably should know, that a child is likely to gain access, unless reasonable action is taken to secure the firearm against access by the child.

Subd. 3. Limitations. Subd. 2 does not apply to a child’s access to firearms that was obtained as a result of an unlawful entry.

MSA §609.66 Firearm exemption for safety and marksmanship courses on school property

Subd. 1d. Felony; possession on school property.

(a) Whoever possesses, stores, or keeps a dangerous weapon or uses or brandishes a replica firearm or a BB gun on school property is guilty of a felony and may be sentenced to imprisonment for not more than two years or to payment of a fine of not more than \$5,000, or both.

(b) Whoever possesses, stores, or keeps a replica firearm or a BB gun on school property is guilty of a gross misdemeanor.

(c) As used in this subdivision:

(1) “BB gun” means a device that fires or ejects a shot measuring .18 of an inch or less in diameter;

(2) “dangerous weapon” has the meaning given it in section 609.02, subdivision 6;

(3) “replica firearm” has the meaning given it in section 609.713; and

(4) “school property” means:

(i) a public or private elementary, middle, or secondary school building and its grounds, whether leased or owned by the school; and

(ii) the area within a school bus when that bus is being used to transport one or more elementary, middle, or secondary school students.

(d) This subdivision does not apply to:

(1) licensed peace officers, military personnel, or students participating in military training,

who are performing official duties;

(2) persons who carry pistols according to the terms of a permit;

(3) persons who keep or store in a motor vehicle pistols in accordance with sections 624.714 and 624.715 or other firearms in accordance with section 97B.045;

(4) firearm safety or marksmanship courses or activities conducted on school property;

(5) possession of dangerous weapons, BB guns, or replica firearms by a ceremonial color guard;

(6) a gun or knife show held on school property; or

(7) possession of dangerous weapons, BB guns, or replica firearms with written permission of the principal.

Appendix 5

Switching your shooting side and ariel shooting techniques

Answer specific questions on this during the break or after the clinic. Many shotgun shooters will also find the following information useful, even if they are not intending to switch their shooting side.

A question may arise as some people realize that they need to change from right- to left- or left- to right-hand shooting due to having a dominant eye that is other than the eye they have traditionally used for shooting. To make this switch, a person will have to stimulate the brain using the new way. After hundreds or thousands of repetitions, you will have developed the “muscle memory” necessary to make this change feel natural¹.

Airguns are a quiet, low recoil, fun, and economical tool for this practice.

Use safety glasses for all of the exercises below. **Practice safe muzzle control** at all times.

Rifle shooters begin to feel comfortable by the time they shoot 500-800 pellets, using the proper rifle shooting process as outlined in the clinic manual.

Shotgun shooters will want to practice a series of three types of exercises for a total of 1,200 to 1,800 repetitions to change this muscle memory and make shooting happen automatically.

Do the exercises below and use the following shooting process.

Shotgun shooting process:

- a. Make your shotgun an extension of your body. Proper gun fit along with mental concentration on what you are doing and on the target are important. Trigger finger will be alongside the receiver until you are ready to take the safety off and fire.
- b. Stand erect with feet relatively close together and pointed so that an imaginary line drawn between the heel of the rear foot to the toe of the leading foot will continue on to the point on the target where you will direct your shot.
- c. Hold your head straight (up and down), **look straight ahead**, and keep both eyes open. Many prefer to have their body leaning somewhat forward.
- d. Begin swinging as you mount the gun. Have the index finger of the hand, holding the forearm, pointed forward and parallel with the barrel.

¹Technically, when you stimulate the brain using the new way, it makes new neuron interconnections between dendrites. Then, with each repetition, more of the fatty protein Myelin is added to these connections. The more Myelin, the more effortless the new process becomes. Repetitive practice makes it happen automatically.

- e. Lift the gun straight up to your cheek—use the same point each time. Then, connect the stock with your shoulder². Trigger finger will now begin taking safety off and completing its movement to the trigger by the completion of step g below.
- f. Use your dominant eye to look automatically down the barrel through the front sight and focus on a specific part of the target (upper right or left corner for aerial targets and bottom of target for small stationary targets) as you
- g. swing at the same speed as the target, and
- h. pull the trigger at the instant the mount is complete and the target is in focus.
- i. Follow through by keeping your shotgun in position for 2-3 seconds after you shoot. This will help you concentrate on your shooting and reduce the influence of distractions.

Exercises:

1. Walk and randomly point at things using the index finger of the hand which will now hold the forearm of a rifle or shotgun. This is the hand opposite your dominant eye. You will hold that hand, palm up, and point as though you are holding the forearm of the shotgun with your index finger pointed forward. Point at a total of 600 items.
2. Walk and randomly point at things which are 15-25 feet away with an airgun³. Bring the

² **Proper shotgun mount** means that you have your cheek touch the stock in the same spot each time and **only then** roll your shoulder into the stock. This way you will keep the same sight picture. If the stock hits your shoulder before it is touching your cheek, you will change your sight picture each time.

³ For this exercise, modify an airgun into a “**shotgun**” that fits you. You want your shotgun to be an extension of your body. The following will help make this happen. Do this in the order given.

A. Select an airgun which has a reservoir for BBs or autoloading cylinder of pellets and cocks via the forearm with a single pump or is gas operated. The more similar the operation of the airgun is to your shotgun, the better.

B. Make it into a **pointing gun**. Remove the rear sight and remove or file down the height of the front sight. Remove the front sight hood if one is present. Use dense Styrofoam and duct tape or Bondo to build up a sighting plane from the receiver to the front sight.

C. Make the **stock the correct length**. First, bend your arm at a right angle at the elbow and have your palm open and flat. Next, using a yard stick, measure from the inside of the elbow bend to the crease of the first joint on your index finger. Use this measurement to determine if you have to add to or subtract from the gun stock's length. The measurement will be from the butt plate to the trigger. To measure, just stand the gun on its butt on a table with the yard stick standing likewise. Now look past the front of the trigger to see the measurement on the yard stick.

Footnote ³ continued....

You can lengthen the stock using 1-inch thick dense Styrofoam and duct tape or shorten

airgun up into shooting position each time, using the shotgun shooting process outlined above, except for actually firing a projectile. It is important that you are pointing and not using a sight and that you practice the proper shotgun shooting process each time. Have the index finger of the hand on the forearm pointing forward and parallel with the barrel. Also have the stock firmly, but not tight, against your shoulder and “pull forward” on the forearm with the hand holding the forearm. This will significantly reduce “felt recoil” once you switch to a real shotgun. You will use this method from now on.

Walking in a pasture with dandelion blossoms is great for this exercise. Another option is to scatter one to two dozen ping pong balls in an area where the grass is quite short or to walk in a plowed, rock free, field using chunks of dirt for targets. This is repeated on 600 targets.

3. Do exercise number 2 again, but this time point and shoot the target each time. Again, proper gun mount, index finger position, and point and shoot versus sighting is very important. Doing your practice exercises in a natural setting will enhance developing “muscle memory”. The more sights, sounds, smells, tastes, and touch associated with the repetitions, the stronger and more effortlessly working the new neuron connections

it by cutting out a piece and reattaching the butt plate. On plastic stocks, you may want to cut out a section starting about 1-inch in from the butt plate and then reattach this butt piece using duct tape or Shoe Goo.

To do a final check for proper stock length, mount the gun and hold it in place. Then, using the fingers on the hand holding the forearm check to see if 2-3 fingers fit between the tip of your nose and your thumb on the hand holding the stock grip.

D. Build up the **comb** with Styrofoam and duct tape or Bondo so that as you bring the stock up to your cheek, your head remains straight up and down, and your eye looks down the sighting plane. Build the comb up if your head is tilting or you are seeing the back of the receiver.

Check for the proper comb height by standing in front of a mirror with the gun unloaded. Close your eyes and mount the shotgun, with the stock anchoring to your cheek before you pull it back to your shoulder. Open your eyes and check the position of your eye in relation to the top of the barrel's sighting plane and check if your head is upright. Build up or decrease the comb and keep rechecking until it is right.

If you build the comb so that it is level (starting about an inch from the butt plate and going forward to the grip area), your head will be upright regardless of the thickness of the clothes you may wear under varying weather conditions, and the recoil will go alongside rather than into your cheek.

E. The stock's grip size will vary with hand size. All three fingers of the hand must fit on the grip while your index finger is on the trigger. The angle should be such that it is comfortable and the thumb is wrapped around the top but not in the way of the receiver.

become. Note: Always remember to obtain permission before entering private land. Some landowners may even want to try these exercises, so be sure to extend an invitation to have them join you when you ask for permission to use their land.

4. You can also do an eye exercise without a gun. Pick out something that is close to you, similar in distance to the front bead on a shotgun. Pick out a second object that is 25-40 yards from you. Now quickly look back and forth, back and forth, etc., alternately looking at the close object and then the distant object. Make sure you concentrate on the one object before switching to the other object. As when shooting, make sure your head is straight up and down and you are looking directly at the objects. This is the only way your eyes work together and you get optimum focus within your eye.

5. Reread this information a number of times, interspersed with practices so that you are acutely aware of what you are trying to accomplish, how well you are accomplishing it, and what you have to practice more or change.

Continue to refine your new skills by practicing the shotgun shooting method 10-15 times each day with an unloaded shotgun. This can easily be done indoors.

Now **switch to moving targets**.

Begin indoors or outside using three newspaper/magazine filled cardboard boxes as described in Appendix1 of the Participant's Handbook. The targets should be about waist to shoulder high, spread apart so they fit on an 8-foot table and 10-12 feet from the muzzle. Have a secondary backstop to block any projectile that would miss the cardboard boxes.

You will need someone to help you with this exercise. When you are ready to shoot, have the other person touch either of your shoulders or the center of your back to indicate which of the three targets you should shoot at. This way you will have to respond to target location rather than planning which of the targets you want to shoot. Repeat this process until you consistently have a 1-1/2- to 2-inch, five-shot group on all three targets. This and the following steps probably will not occur in one setting each, but may require a number of settings over several days or weeks.

An optional step, **for upland game bird hunters**, is to set up a walking lane of targets outdoors. Select an area where there is a 100-yard safe area beyond each target. You will walk a "path" while shooting at a parallel row of targets off to one side. Make the targets by pounding a row of laths parallel with the path. The laths will vary in distances of 15-20 feet away from the path and at about 15-foot intervals. Wrap the laths with bubble-type packing material and at the top make a 3-inch diameter ball of the material covered with aluminum foil. Now have someone walk with you, but on the side away from the targets. As you walk, the other person will periodically tell you to shoot at one of the three targets closest to you, either opposite, ahead of, or behind you. When you reach the end of the lane, work your way back to the start. Repeat as needed until you consistently hit the

targets. This will give you “flushing bird” practice.

Now we go to **aerial target practice**. Select an area that is safe for 300 yards beyond the target. Choose a target which can be thrown or launched from alongside or back of the shooter. It also must not cause the BB or pellet to ricochet. Some have made their own by placing an 8" x 8" piece of bubble packing material in their cupped hand (bubbles towards your skin). Then put a chunk of soft candy in the cupped area, wrap the packing material into a ball, and cover it with an 8" x12" piece of aluminum foil. This will make a 3-4-inch diameter ball to start with. Gradually reduce the ball size to about 1-inch. This can be thrown in about a 30-foot arch. It often will take 25 shots before parts of the ball need to be replaced. The aluminum foil holds the material together and also produces a sound when the target is hit.

Use the shotgun shooting process from above. Target focus is critical, but now the new dimensions of swing speed and lead come into play. Shotgun swing speed has to be the same speed as the target. Lead will automatically happen if you have a “shotgun” that fits you, you have done the practices outlined above, and you stay focused on a specific portion of the target. You will be impressed with the high percentage of aerial targets you hit with a single projectile, and likewise in the next step, when you switch to a powder-burning shotgun with multiple projectiles.

Your final **switch is from the airgun to the shotgun**

As you have learned, the shotgun must fit the shooter so that it is an extension of the body and your natural movements. Note for left-handed participants: Many shotgun stocks do not come straight back from the center line of the barrel but rather “cast” a little to the right of center so that a right-handed shooter’s eye lines up more easily. If shooting left-handed, check for this. You will find that a stock with none or a left cast will work best.

Start your actual shotgun shooting by having someone load your shotgun for you, intermixing loaded and dummy rounds. The dummy rounds should have “snap caps” so that the shotgun’s firing pin is not damaged. This will help you prevent and overcome any flinching that may develop. Your previous practice with the “pull forward” method, described in exercise number 2 above, will now be much appreciated.

When shooting clay targets, follow the largest piece with your shotgun as it falls to the ground. This may help you keep your mind off of the noise and recoil.

As you accomplish the above steps, your self-confidence and score will increase and you will probably shoot better than you have ever shot before, all while using your dominant eye.

Implementing **Coaching Techniques**

As you read the above information you may find yourself desiring to help others learn this, or you may want to apply this to your own shooting but have no one to “coach” you. The following coaching techniques may help you coach others or teach yourself.

1. **Explain and model** what you want the student or group to do. This gives an overview of expectations to the student. Tell and show them the “what” and “why” of each step of the shooting process. Go through it slowly as you emphasize all of the key points of the process.
2. Have **student go through the step/s with a partner or in a group**. When several students are working together to practice the techniques, what one forgets another will remember.
3. Have students go through the step/s **individually** as you check their techniques.
 - a. Ask students **pertinent questions** as they go through the shooting process. This will help them understand the “what” and “why” of each step of the shooting process. Ask additional questions so they recognize what they are doing right or wrong and become acutely aware of what they are trying to accomplish, how well they are accomplishing it, and what they have to practice more or change.
 - b. Provide answers and suggestions for change if they can't come up with their own corrections.
 - c. Challenge students to **practice frequently and perfectly** each time. Once they have accomplished “form”, then with practice the shooting process will become more effortless, fluid, and faster.
4. Instructor/coach does a quick review of the process with the students. The students have now experienced the process and can better relate to what is expected. They will master a deeper understanding of the process as they again see the instructor quickly tell and show the “what” and “why” of each step.

Appendix 6

Scopes for high velocity airguns

When choosing a scope for a higher velocity airgun, you should select a scope specifically designed for airguns. Here is some insight into why.

Like your high-powered rifle, airguns recoil backwards, but first they snap forward and often they produce significant vibrations from the mainspring. Most regular scopes are not designed to withstand this forward snap and mainspring vibration. A regular scope is soon destroyed due to metal fatigue, broken internal lens braces, etc. To prevent this, a good airgun scope's lenses and **reticule are braced at both the rear and front** while in most regular scopes they are only braced at the rear.

Another reason airgun scopes need to be different is because of the distance at which you normally shoot an airgun. Ten to 30 yards is common. Most regular .22 scopes have been optically set for shooting at 50 yards and many high-powered rifle scopes are set for 100-150 yards. **Parallax error** will be present at any other distances than this setting. The greater the difference in the distance and the higher the power the scope, the greater the parallax error will be. A good airgun scope has a ring which you can turn to change the distance from the objective lens to the reticle. This, in effect, optically resets the scope for a different distance, thereby removing parallax error at the particular distance it is currently set for.

To see what parallax error looks like, set a regular .22 4x scope on a solid surface. Look through the scope at an object about five yards away. Now move your head a little to the left or right. You can watch the reticle "move" nearly an inch. Now your "point of impact" for the bullet would be off this much. If you are shooting your airgun at 25 yards, many regular scopes will have a parallax error of about one inch. Add this to "human error" and you can easily miss your target. This often is a reason some people have a hard time "sighting in" a high-power airgun.

If you are **having problems sighting in a high-power airgun**, there are three things you should check. First, make sure the stock screws are tight, then recheck that the sights are on tight, and finally resolve the parallax error described above. Check these three things and most problems are solved.

Appendix 7

Introduction to shooting in an event setting

Events such as banquets, conventions, the Fish Fair, Boy Scout Jamborees, county fairs, and even family reunions provide an excellent opportunity for youth and adults with little or no experience to try shooting an airgun in a supervised setting. Place special emphasis on encouraging hesitant adults to shoot. The following guidelines will help you make this a safe, positive, and memorable experience for everyone.

Goal:

Provide a safe, positive first-time shooting experience for a large number of people as part of an organized event.

Objective:

Each person will shoot an airgun three times, receive additional information on shooting safety and education programs, and be given his/her target to keep as a “trophy”.

Explain to the event organizers that a limited number of people will be able to shoot in the time you have available. Typically, using three guns you should be able to accommodate about 50 people, shooting three shots each, in an hour¹. At events with

¹**“Constant air” for your CO₂ airgun**

For events where you want to have many shooters per hour, and the event lasts a day or longer, you may wish to use a “constant air” source for your airgun, rather than continually replacing the 12-gram CO₂ cartridges. You will save time, natural resources, and money.

Proper safety training and safety procedures must be learned (from your gas supplier) and followed as the CO₂ from the constant air source is at approximately 830 pounds of pressure per square inch and the temperature is about -130 degrees F. Always wear safety glasses and gloves during setup and tear down. Vented gas can accelerate particles of dirt and debris to high velocity and immediate and destructive freezing of exposed flesh is possible.

For the Crosman 1077 airgun, you can order a transfer tube (#10050) and transfer knob (#10052) to replace the piercing tube cap. These items are available from Crosman. (Note: lubricating the threads on the transfer knob and standing the gun upright on the butt plate is helpful for assembly.)

To this transfer knob, you can attach a paintball gun deluxe remote (\$35-65) using gas approved sealant on the threads. It consists of a quick disconnect, slide-check valve (to allow ease of disconnect without having to release pressure by loosening the hose from the tank), a 42-inch steel braided hose with 1/8-inch NPT male ends, and a tank adapter. A 7-, 9-, 12-, 20-, 32-ounce or 20-pound tank can then be attached and set upright on the table to supply the CO₂. To help estimate your needs for an event, you may figure you will get about 100 shots per ounce of CO₂.

Several additional 42-inch hoses (\$10-15 each; available from paintball gun supply stores), one or more T's and some straight-line connectors could be used to hook up several guns to the same CO₂ tank. In

smaller numbers of participants, such as scout troop functions or sportsman club meetings, you may be able to increase the number of shots each individual gets to shoot.

With these guidelines in mind, first **priority should be given** to people who have never shot a gun before, or to those who have limited shooting experience. Second priority is given to experienced shooters who are willing to set up an airgun range in their homes so that they can introduce others to the fun of shooting.

Footnote ¹ continued...

such a case, a 20-pound tank with a syphon or dip tube (necessary so that liquid, not gas, is transferred) works well. A pressure regulator is not necessary. A 20-pound tank will provide about 15,000 shots. Refills are \$15-25. This would be equal to 300-400 of the 12-gram CO₂ cartridges, and reduce the amount of metal needing to be recycled.

If you are using an airgun equipped with constant air, be sure to follow the directions exactly as given. It is very dangerous if you do not **follow the directions in the order given**. The directions may look something like this:

1. Attach flexible steel hose (use the quick disconnect/slide check valve end of the hose) to the Crosman 1077 airgun nipple at end of forearm.

Important note: Now is the time to make sure you know the difference between the ring which you pull back to allow the nipple to attach (knurled) and the ring which is on the slide check valve and also moves (has brand name symbol on it).

Practice moving the slide check valve now so you are ready for step #4 below.

2. Slide the slide check valve toward the gun connection. This will allow CO₂ to go into the gun immediately. It is hard to move the slide valve later if you fail to do this now. It also will destroy the O-rings quicker, so move only if you have to stop a leak.

3. If you are using 9-32 ounce tanks: Inspect O-ring on top of CO₂ tank—make sure it is in place and smooth. Attach CO₂ tank to flexible steel hose by turning it clockwise. A drop of pellet gun oil on the threads and O-ring will help this process if it turns hard. A little CO₂ will leak out as you turn it, but turn it tight until the CO₂ stops leaking.

If you are using a 20-pound CO₂ tank, connect all of the airguns to the quick disconnect valve end of the hoses, slide the check valve shut off towards the forearm of each gun so that it will be on. It may destroy the valve if you move it under pressure. Do so only to stop a leak. Stand clear of the area where the guns connect to the hoses. Then, and only then, turn on the pressure from the CO₂ tank.

4. To disconnect: FIRST (very important) the CO₂ pressure must be released before you can disconnect the hose from the airgun. To do this, shut the CO₂ tank off, then slide the slide check valve away from the forearm end about 3/8-inch. Make sure you use the ring with PMI on it. This does not move easily as there is 830 pounds of pressure on it. You will hear the CO₂ release. DO NOT TOUCH THE KNURLED KNOB. (This would result in the hose flying from your hand with the 830 pounds of pressure...same as a pellet.)

5. Once you hear the CO₂ release, you can remove the hose from the gun via the knurled knob and the tank from the hose.

Another reason to have experienced shooters participate is so that they will understand the effectiveness of using the red dot sights and forearm rest to teach beginners.

It's a good idea to have the following three **brochures** available in several locations so that both observers and shooters can pick them up.

Shooting for Safety includes some basic shooting safety rules and describes how to set up an airgun range in your home. These are available from the National Rifle Association.

Targeting Excellence: Share the Experience creates an awareness of some of the benefits derived from learning to shoot, tells where to get more information about shooting, and lists some ongoing shooting programs available for youth. These are available from the DNR at Camp Ripley.

Hunting the Right Way describes the DNR's Firearms Safety, Advanced Hunter Education, and Bowhunter Education programs.

We recommend that you schedule an Introduction to Guns and Gun Safety clinic about three weeks after the event. Have a sign-up sheet at the event so that people can preregister for the clinic.

Set up your shooting area as outlined in Appendix 2².

The shooting range will require one coach for each gun as well as an overall "safety person" and a person who will clean safety glasses, load pellet clips, etc. At least one of the shooting coaches or the safety person must be a certified DNR volunteer instructor.

All range coaches should read the instructions provided in this appendix and **practice loading and shooting the guns before the participants arrive**. Also, **make sure that the guns are sighted in for the distance they will be shooting** at (16-22 feet) since the point of impact rises about one inch for every eight feet from the target when using a red dot sight.

Targets which immediately show the point of pellet impact, such as Shoot-N-C® targets, give an "instant" reward to the first-time shooter. The cost is worth the benefit. Using a forearm rest and red dot sight will result in greater success in hitting the bull's-eye and a positive first time shooting experience..

Target retrieval systems greatly increase the number of shooters you can have per hour. There are a number of commercial systems available or you can make your own. See

²Some use 1/16-inch or thicker steel plate (rather than cardboard boxes filled with magazines and newspaper.) An 8" x 16" plate stops almost all of the pellets. (You may want to bend a 1-1/2-inch diameter pellet catch on the 16-inch end of the steel plate, which will be the bottom.) If you spray the back side of the metal plate with pickup bed coating or vehicle undercoating, you will reduce the noise made.

Appendix 9.

Put out extra pellet cylinders, CO₂ cartridges, the unjamming rod, screwdriver, and targets in small boxes on the range table.

Turn on the red dot sights. It is a switch on the right side of the sight's barrel. Move it to the center click. This is low beam. High beam generally does not work well indoors.

Encouraging Reluctant Shooters

Place special emphasis on encouraging hesitant adults to shoot. Through the process of shooting the airgun as outlined above, we have seen many adults go from "hesitant about guns" to strongly supporting youth gun safety education. It has also caused some individuals to become open to future training and shooting opportunities they otherwise would not have taken.

When the range is in operation, coaches and the range officer should make a point to watch the sidelines for moms and others who seem hesitant about shooting and personally invite them to shoot. Some of the moms may have come to the event just to watch their child shoot. However, with a smile and a little encouragement, you can usually get them to participate. Most find it to be a very positive experience and are happy with their accomplishment, comparing targets with their children and other participants. Some moms may decide to shoot after seeing this kind of positive reaction as well as the interaction which takes place between the mothers and children.

Somewhere along the waiting and also near the firing line, place several signs which read "moms receive special consideration." This alerts those waiting in line that an instructor may "guide" a reluctant shooter to an empty shooting lane chair to shoot without having to remain in line.

Hand a "hesitant shooter" a pair of safety glasses, offer some words of encouragement, and guide the person to the next available chair. Statements which have been used successfully include: "This event was designed for beginning shooters". "Your child will be better able to relate to you as you discuss gun safety if you also shoot". "Here is a pair of safety glasses for you to use and here is an open chair for you". "Moms receive special consideration here".

Another effective technique is to have someone who was hesitant, but enjoyed the shooting experience, relate his/her experience to others and encourage them to shoot. Often he/she will say, "I can't wait to show this target to my sister". or "I'm going to put this in my diary".

This too is the time to announce the dates and locations for upcoming Introduction to Guns and Gun Safety In The Home clinics and Firearms Safety classes. Have sign up sheets available in the waiting line.

Logistics

While people are waiting to shoot, they should do the following:

- Determine their eye dominance by following the written instructions.
- Sign in the registration book (name and city where they live—mail these to: Safety Education Coordinator, DNR Education Center, 15011 Highway 115, Little Falls, MN 56345-4173).
- Put on a pair of safety glasses.

Again, somewhere along the waiting line, place several signs which read “Moms receive special consideration.” This helps to encourage “hesitant moms” who had not planned to shoot and may be watching from the sidelines. You should also **make a sign that includes instructions** for those waiting to shoot, for example:

**Thank you for your interest in gun safety and shooting sports.
While you wait, please:**

1. Print your name and address in the book on the table. This helps us determine how many people were able to shoot and how far they traveled to participate in today’s event.
2. Determine your dominant eye. Don’t assume it is your right eye. In fact, about one-fifth of the population is left-eye dominant.
3. Put on a pair of safety glasses.
4. Go to the next available chair.
5. Follow the coaches directions: put the red dot on the target, slowly/smoothly pull the trigger, and shoot three times.
6. Put your safety glasses in the pail marked “used safety glasses.”

Thank you.

There will be two (or three) shooting lanes and a coach for each lane. When a participant reaches the head of the line, he/she will go to the next open shooting lane chair. The coach will explain the gun’s operation, then have the participant shoot three times. (Shooters can count three, maybe four shots. If you have time, you may want to allow shooters four shots, but three is preferred. More than that is confusing and takes too long to give everyone an opportunity to shoot.) For smaller events, such as group of 20-30 people, six or 12 shots are frequently allowed.

The **dialog between the shooting coach and the shooter** will go something like this (you may want to have a copy of the following where instructors can see it as they coach):

- **Have you ever shot a gun before?**
- **Which is your dominant eye?**
- **Sit with your dominant eye side angled away from the target at about 45 degrees.**
- **This is the safety on the gun. I will take it off of safe when I tell you that you can shoot.**
- **Keep your finger alongside the receiver until you are ready to shoot.**
- **Pick up the gun and place the stock against the shoulder on your dominant eye side. *(You may have to guide them to pick up the gun correctly.)***
- **Place the barrel on the correct height of step on the rest.**
- **Aim the gun by centering the red dot in the glass window and then on the target.**
- **Take a breath, let it partway out, and then:**
 - **Squeeze the trigger slowly to shoot. Keep the gun on target and complete your breath. Shoot twice more: aim, breathe, and squeeze the trigger properly.**
- **After you shoot three times, put the safety on and lay the gun back down. When both shooters are done, I will have you replace the targets. You may keep your target.**
- **If this is your first time shooting, an instructor will sign and date the target for you.**
- **Put your safety glasses in the bucket.**

Many shooters prize their target, especially first-time shooters. It is worth the time for the coach to write the shooter's first name, date, and that this is his/her first three (or however many) shots and then sign it. Frequently, the first-time shooter will keep the **target as a "trophy"** and show it to friends and relatives, explaining what a great time their first shooting experience was and also conveying some of the safety information they learned. This is an excellent way to reinforce the shooting principles they have just learned and to spread the safety message to many people who otherwise would not hear it. Use preprinted targets as described in Appendix 2.

Immediately after they have finished shooting is a good time to **have participants preregister for your upcoming Introduction to Guns and Gun Safety in the Home Clinic**. Have a stack of Shooting for Safety booklets and Targeting Excellence: Share the Experience brochures next to the sign-up book.

The **safety glasses** will need to be disinfected before the next use. Four, 5-quart ice cream buckets can be used for this. One contains the clean glasses; the second contains a disinfectant solution (any type of antibacterial soap will work); the third is a clear water rinse; and the fourth is a place to let the glasses drip before being dried with a paper towel. Once the glasses are disinfected and dried, put them into the first bucket again.

Be sure to turn off the red dot sights at end of the clinic!

The following is information which the instructors should read. Also, they should look at the pictures of how to load the rifles, change CO₂ cartridges, etc.

Range instructors

1. Read directions on how the airgun operates.
2. We want first-time shooters or those who have only shot a few times to experience shooting. Sign and date targets for first-time shooters, for example: Helen's first three shots, date of event, instructor's signature.
3. Each person gets three shots.
4. Please check to see that people are putting their names and addresses in the book on the table. This is very important.
5. If a gun will not shoot, check to make sure the pellet clip rod has been moved all the way to the right until it clicks. This will lock in the pellet clip. Once a pellet clip has been emptied, put it into an empty box to be picked up and refilled. Also note how the pellet clip slides into the magazine—from the side—not the top. Occasionally a jam will occur because a pellet has slipped partway out of the pellet clip. Just remove and replace that pellet.

6. You will get about 40-50 shots per CO₂ cylinder. Change cylinders when you notice the pellets begin dropping lower than normal.

7. Some red dot sights have two settings. The on/off switch on the side of the tube should be in the middle (low setting). Turn off sights at the end of the clinic.

8. Make sure the rod used to unjam a pellet from the barrel is on the range table. Commercially made rods look like a very long screwdriver or can be made from an uncoated brazing rod. (Note that jams seldom happen, and if they do, it almost always is because the pellet clip rod was not moved all the way to the right until it clicks.)

9. The basic instruction for each person should include:

- How to hold firearm (they should already know their dominant eye).
- How to use the forearm rest.
- How to keep gun pointed down range and finger off the trigger.
- How to put red dot in the center of the target.
- How to take off safety and put finger on the trigger when ready to squeeze it.
- How to shoot (three times).
- How to put safety back on and lay gun down.

Emphasize SAFETY!

After the event, send the list of participants, making sure they include the name of the city in which they reside, along with the event name, date(s), location, county, principal instructor's name, and total number of participants to: DNR Enforcement Center, 15011 Highway 115, Little Falls, MN 56345-4173.

Appendix 8

Instructor Pre-clinic Planning Meeting

Determine who is going to:

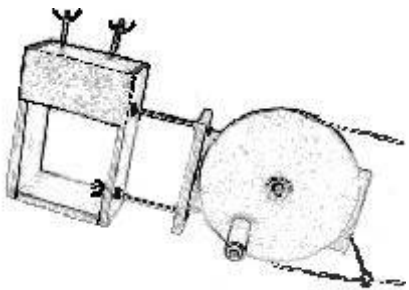
- be the principal instructor - roster responsibility
- order guns from companies - optional (allow 6 weeks for delivery)
- make arrangements for rooms
- advertise clinic
- bring gun storage display items
- bring airgun range primary and secondary backstops
- bring powder-burning guns (listed in this manual)
- set up airgun range and station on handling a gun
- set up station on how to set up an airgun range, “look-a-likes”, selecting equipment and safe gun storage
- set up and make sure that VCR and overhead projector work
- register participants/ensure accuracy
- instruct in classroom
- operate airgun range
- assist at airgun range and handling a gun
- instruct station on how to set up an airgun range, “look-a-likes”, selecting equipment and safe gun storage

Appendix 9

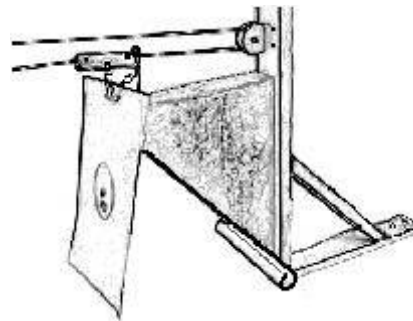
Pellet backstop and target retriever system

The following pellet backstop and target retriever system has worked well. It takes some time to make, so you may want to cut out a number of them at one time. Use quality plywood for the target retriever—it will experience a lot of abuse. Once made, these are durable and quick to put up and take down, using two bolts with wing nuts for the target retriever and a sheet rock screw or clamp to hold the pellet backstop in place.

Target retriever



Pellet Backstop



Materials list:

Wood

- 2 1" x 2" x 12"
- 1 1" x 2" x 18"
- 1 2" x 10" x 11"
- 1 1" x 2-5/8" dowel

Plywood

- 2 1/2" x 3-1/2" x 5"
- 3 1/2" x 3-1/2" x 8"
- 1 1/2" x 1-1/2" x 6-1/2"
- 1 3/4" x 4-1/2" x 9"

Metal

- 1 8" x 16" x .075 sheet metal
- 1 1-1/2" flat mount pulley
- 2 4" lag screw eye
- 4 1/4" wing nuts
- 2 1/4" x 3" carriage bolt
- 1 1/4" x 4" carriage bolt
- 2 1/4" x 5" carriage bolt
- 5 1/4" nuts

- 1 1/4" lock nut
- 10 1/4" washers
- 1 1/2" x 2-1/2" bolt
- 2 1/2" nuts
- 4 1/2" washers
- 1 1/8" x 3/4" x 3" piece of aluminum
- 1 small binder clip
- 1 4" piece of soft wire
- 4 3/4" sheet metal screws
- 8 1-5/8" sheet rock screws
- 2 2" sheet rock screws
- 12 1-1/4" finishing nails

Other

- 50' of #18 braided mason's line
- 10" pulley - plywood, Masonite, or metal (can make or buy)
- wood glue

Pellet Backstop

First make a base frame from 1" x 2" wood. Base is 12-inches long, upright is 18-inches long and angle is 12-inches long but with 45-degree cuts. The diagonally cut piece which holds the metal backstop plate is cut from a 11-inch long piece of 2" x 10". To prevent splitting of wood, pre-drill holes before assembling with Sheetrock screws. Assemble this, using the sketch to help guide you.

Attach a metal backstop which is made from an 8" x 16" piece of .075 or thicker sheet metal which has been curled at the bottom. To make the curl, I cut a ½-inch deep slot, lengthwise, in a 1-1/4-inch diameter shaft. I then hand bend (cold) the sheet metal around this to form a nearly complete circle curl and then drill and counter sink two holes for Sheetrock screws near the top and curl.

Next attach a 1-1/2-inch flat mount pulley onto the upright, about 1-inch above the 2" x 10" which holds the metal back stop, using four 3/4-inch sheet metal screws. On the top and about 1-1/2" in from the front of the 2" x 10", drill a 5/32-inch hole and insert a 4-inch lag screw eye. This will cause the target holder to stop in the correct position each time, with the target paper resting against the top edge of the metal back stop. You may have to adjust this lag screw eye up or down depending upon the distance your retriever is from the backstop. The line should go through the eye without touching it.

Line and target holder

Use about 50 feet of #18 braided mason's line. Do not use twisted line as it will stretch a lot and cause the target to twirl.

The target holder is made from a 1/8" x 3/4" x 3" piece of aluminum. Three 5/32-inch holes are drilled in it, one near each end, one-third of the way from the top edge, and the third one is at the center but about two-thirds of the way from the top edge of the piece. Attach a small binder clip to the center hole using a 4-inch piece of soft wire or two thicknesses of garbage bag ties. Hint: Fold the wire in half, insert one of the binder releases into soft wire loop. Wrap each part of soft wire loop around the binder release at least once and then attach it to the center hole, looping through it twice. This will help prevent the target from turning.

The line is threaded through the 1-1/2-inch pulley, from the top, and then the lag eye before being tied to one end of the aluminum target holder. The other end of the line is then tied to the other end of the aluminum target holder. You need not cut the length of the line, when setting up for different distances between the retriever and backstop, if you just ball up the excess end and cover it with a piece of duct tape.

Target Retriever

The retriever is basically a box section and a pulley section connected by a pair of bolts.

This allows you to make minor tightening adjustments to the line without retying it at the target holder.

The box is made from a quality grade of $\frac{1}{2}$ -inch plywood and a piece of paneling. The pieces are two each of $\frac{1}{2}$ " x $3\frac{1}{2}$ " x 5", and two other pieces $\frac{1}{2}$ " x $3\frac{1}{2}$ " x $8\frac{1}{2}$ ". The panel piece is $\frac{3}{16}$ " x $2\frac{1}{2}$ " x 6". Note: Look at the sketch to see how to assemble pieces, using glue and finishing nails.

In the top of the box, drill two holes $\frac{1}{4}$ -inch diameter each. Just make a mark diagonally across the top of the box and then drill the two holes $3\frac{1}{2}$ inches apart. Use an 8-inch piece of wood to make a template of these two holes so that all of your boxes will be drilled identically and then when you drill holes in a 2" x 6" above the table, they too will be drilled identically.

Now insert a $\frac{1}{4}$ " x 3" carriage bolt from the inside of the box up through each of these holes. Add a washer and wing nut to each.

Next drill two holes $\frac{1}{4}$ -inch diameter into the side of the box. These holes will be $1\frac{1}{4}$ " from the edge where the panel piece is attached. The first hole is drilled $1\frac{1}{2}$ " from the bottom and the second hole is drilled $5\frac{1}{4}$ " from the first. Using your template, make a template of the distance between these two holes as you will drill matching holes in the next step.

The pulley holder is made from a piece of $\frac{1}{2}$ " x $1\frac{1}{2}$ " x $6\frac{1}{2}$ " plywood and a piece of $\frac{3}{4}$ " x $4\frac{1}{2}$ " x 9" plywood. Now, using the template, drill two $\frac{1}{4}$ -inch holes $5\frac{1}{4}$ -inches apart into the $\frac{1}{2}$ -inch thick piece of plywood. The holes should be centered in both directions. Then, take this piece and center it (both directions), glue, and nail it to one end edge of the $\frac{3}{4}$ -inch plywood. On the edge of the other end of the $\frac{3}{4}$ -inch plywood, drill a $\frac{9}{32}$ -inch hole, $\frac{1}{2}$ -inch from the bottom and at a 45-degree upward angle. Into this hole, you will insert a 4-inch lag screw eye. Before inserting this eye, use a screw driver blade to spread the eye open enough so that the mason's line can slip through. You will bend this lag screw eye to act as the target holder stop on this end (similar to how it works at the backstop.)

In the $\frac{3}{4}$ -inch thick plywood, drill a $\frac{1}{2}$ -inch diameter hole located in the center, but only 1-inch from the top edge.

You will need a 10-inch diameter pulley with a $\frac{1}{8}$ - $\frac{1}{4}$ -inch groove about $\frac{3}{8}$ -inch deep. It can be purchased or made from quality plywood, Masonite, or hardboard. The hardboard ones can be made by drilling a $\frac{1}{2}$ -inch diameter hole in the center of two 18" x 10" squares and one $\frac{1}{4}$ " x $9\frac{1}{4}$ " square pieces. Then cut these into circles and sandwich the $\frac{1}{4}$ -inch piece with the $\frac{1}{8}$ -inch pieces, glueing and nailing them together.

Attach a handle to the pulley by drilling a $\frac{1}{4}$ -inch hole about 1-inch from an edge. The handle is made by drilling a $\frac{1}{4}$ -inch hole through the center of a piece of a wooden dowel or broom handle about 1-inch diameter by $2\frac{5}{8}$ -inches long. Pound a $\frac{1}{4}$ -inch washer

snugly over the shoulders of a 1/4" x 4" carriage bolt. Then insert it into the dowel handle, add another 1/4-inch washer, a nut, and then another washer before inserting it through the hole in the pulley. Then add another washer and a 1/4-inch lock nut. This will allow you to tighten the handle bolt to the pulley, yet let the dowel turn freely.

The pulley is attached to the 3/4-inch plywood as follows. Begin by putting a washer onto a 1/2" x 2-1/2" bolt, inserting that through the pulley, adding a washer, nut, and then another washer before inserting the bolt through the 3/4-inch plywood. Then secure with a washer and nut. This arrangement will allow the pulley bolt to be tightened solidly to the 3/4-inch plywood, but allow the pulley to turn freely.

Now put 1/4" x 5" carriage bolts into each of the holes in the 1/2-inch plywood that is attached to the 3/4-inch plywood. The bolts protrude in the opposite direction as the 3/4-inch plywood. Add a washer and nut to each and snug them up, pulling the bolt shoulders into the plywood. Note: The 4-inch lag screw eye is nearest the bottom edge.

Next add a nut to each of the bolts, turning them on about 1-inch. Now add a washer and then insert these bolts into the holes in the sides of your box, with the top bolt going into the hole closest to the paneling piece. Add a washer and wing nut to each and you're ready to set it up.

Set up

A 24-inch wide table about 30-inches high seems to work best. It works well to have three feet of space for each instructor with participant. Squeezing three shooting lanes into an eight-foot space is hard. On each end of the table, attach an upright 2" x 4" x 6" and connect these on top with a 2" x 6" that parallels the table. Note: You may want to cut the upper end of the uprights so they are 5/8-inch shorter on the target side. This way your target retrievers will aim more directly at the backstop, which should also be up on a 24-30-inch high table. Depending upon the location, there are several ways to cause the uprights to stand. If using old tables, you may be able to screw or clamp the uprights to the table ends, otherwise attach a 24-inch or so square piece of plywood to the upright, but parallel to the table end. A third way is when you can dig a post hole for the upright out-of-doors. You may also need a 2" x 2" connecting the uprights together below the table top.

Now, using your template, drill holes for the bolts that go through the top of the target retriever box and attach the box to bottom side of the parallel 2" x 6". You may want to drill these hole sets 1-1/2 feet from each end and one set in the center. An alternative way is to mount the retrievers to 2" x 4" uprights which are attached to the shooter's side of the table, such as in the photo.



Clinic GOAL

To help you replace:

- misinformation,
- curiosity, and
- fear

about guns
with:

- **knowledge,**
- **understanding,**
- **and respect.**

You will learn in this clinic:



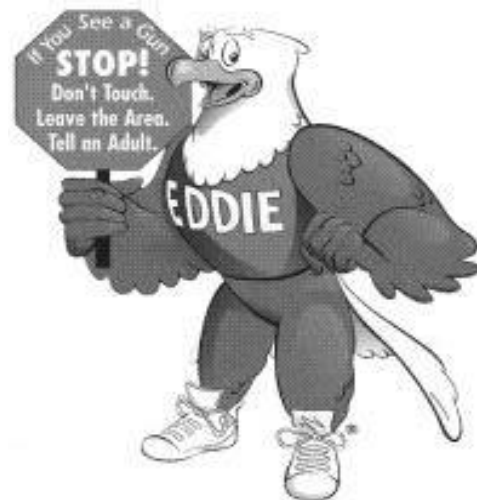
1. **Basic terms** about and types of guns
2. How to safely **hold**, **shoot** and **store** a gun
3. What **babysitters** should know about guns—including what to do if a young child suddenly appears with a gun
4. Optional - adults only—**how to** make a gun safe and how to teach youth about gun safety

Gun safety rules for the young child:

1. A child only holds or touches a gun if a parent or responsible adult is **present** and **gives permission**.

2. If no parent or responsible adult is present when a child sees a gun, they should:

stop,
don't **touch**,
leave the area, and
tell an adult.

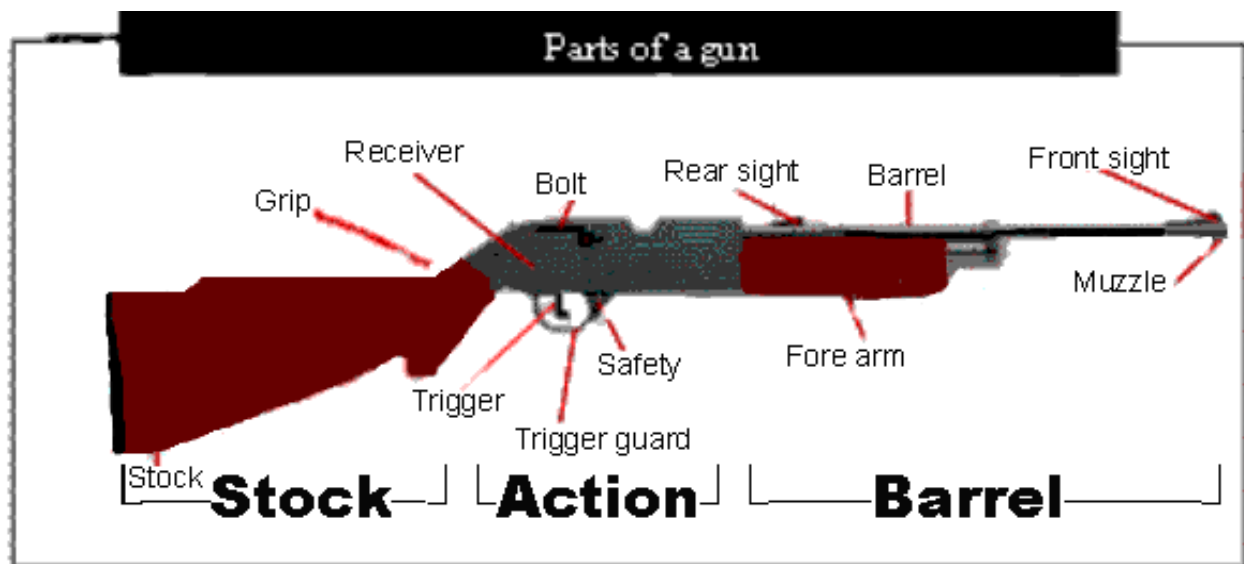
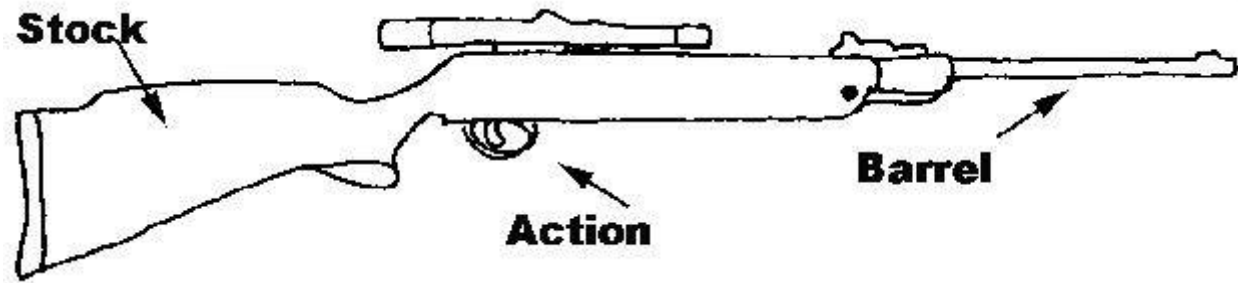


Questions a babysitter should ask:

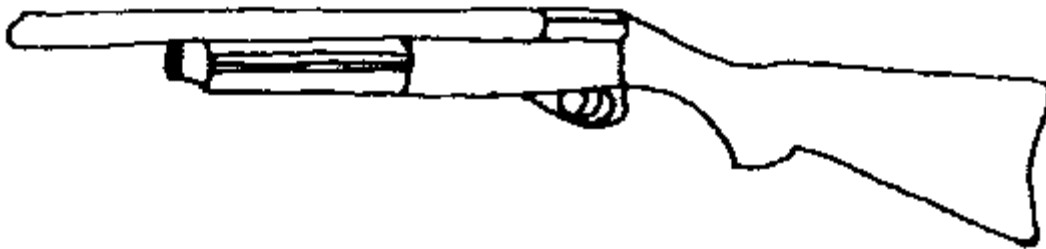


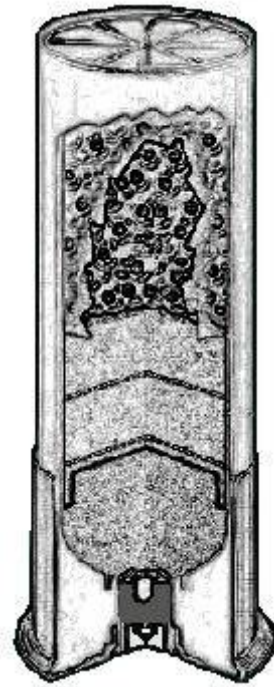
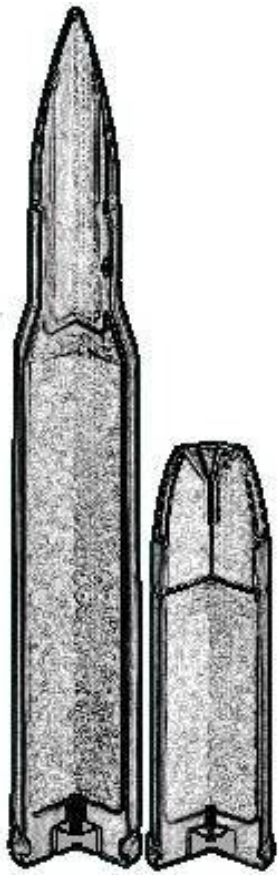
1. Are there any knives, poisons, or guns in the house and are they stored properly?
2. What are the rules you have regarding the children using play as well as real knives and guns while I am babysitting here?
3. What do you want me to do if a gun is found?

Three main parts of a gun:



Types of guns:





Carrying a gun safely:

Keep your finger outside the trigger guard and **alongside** of the receiver, and:

1. Treat each gun as if it were **loaded**. Load it only when you are ready to shoot.
2. Keep the muzzle always pointed in a **safe direction**.
3. Be sure of your target and what is **beyond**.

How far will the bullet go?

Determining your dominant eye:

1. Pick out a distant object and look at it with **both eyes open**.
2. Extend one arm in front of your body, with the thumb pointed straight up, and cover the object with the thumb.
3. While continuing to look at the distant object, close one eye at a time. Determine which eye continues to see the thumb covering the object.
4. This is your dominant eye.

Elements of shooting:

- Position
- Sight alignment
- Sight picture
- Trigger control
- Breathing
- Follow through

Shooting guidelines:

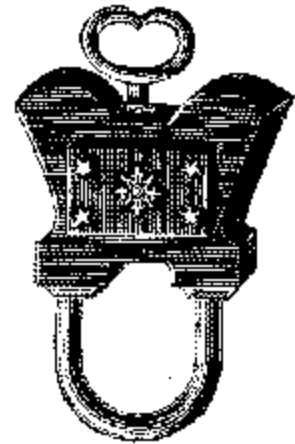
1. Sit at table—45° angle, shooting shoulder farthest from table. Gun should naturally point towards target, may have to adjust body angle.
2. **When your coach tells you**, pick up gun by stock grip. Keep finger away from trigger. Gun is **already loaded**.
3. Place **stock against shooting shoulder** ; gun barrel on the rest.



Shooting guidelines: (Continued)

4. Proper sight alignment and sight picture.
Aim with dominant eye. Red dot in center of glass window. Red dot on target. Cheek against stock.
5. Trigger control. Push **safety off.**
6. Place index **finger on trigger.** Trigger about **halfway between** tip and first joint of index finger.
7. Take a breath, let it part way out until comfortable. Hold remaining breath while squeezing trigger.
8. **Squeeze** trigger; smooth, continuous backwards pressure. Keep red dot on target, continue holding breath.
9. Continue holding gun on target for a second or so after shot fired. **Follow through.**

Babysitters who find a gun that is not locked up should:



- Remove the children from that area and lock that area.
- If this is not possible, move the gun or call an adult who can move the gun to a safe location.

Young child with a gun:

1. Determine which is **safest direction** for the child to point the gun.
2. Use a distraction question plus pointing.
3. Step forward and **control muzzle**.
4. Have **child release grip** on the gun.
5. **Store gun** in a locked area.
6. **Advise parent(s)** of incident.

