

# ABC ON THE FARM

*Safety Program for Children - Grade Five (approximate age)*

## Description of Course:

This educational program is designed to teach children in grade 5 basic rules of farm safety. The program consists of the following components:

1. An in-school presentation by a safety volunteer (that's you).
2. Take home materials designed to encourage interaction between children and adults. View products at [www.agfoundation.org/safety/](http://www.agfoundation.org/safety/).

## Goals:

ABC on the Farm is a prevention oriented program designed to enable students to:

1. Identify potential hazards on the farm.
2. Practice simple farm safety rules.

## Target Audience:

Children in grade 5

## Instructor Requirements:

The instructor should be knowledgeable about the following material and be able to interact effectively with children and adults. DO NOT read from this to the children. Become familiar with the material before going into the classroom.

## Recommended Arrangement for Space and Facilities:

- Contact the classroom teacher prior to presentation. Determine if whole class or small group participation is more appropriate.
- Reserve TV/VCR, and display table for demonstrations for your presentation date.
- Plan the physical setting - where will the presentation take place?
- Determine how many students are in each group for preparation of take home materials.
- Determine if there are students with special needs (e.g. visually impaired, hard of hearing, students who have experienced family loss due to a farm fatality).



## Equipment and Supplies Needed:

### **ABC Presentation Kit**

- π Safety Trainers Manual
- π Colored Posters available at [www.agfoundation.org/safety/](http://www.agfoundation.org/safety/).

### **TV/VCR**

### **Video Tape**

- π "Safety Net" (and others available from Farm Safety 4 Just Kids [www.fs4jk.org](http://www.fs4jk.org))

### **Demonstration Material**

- π Cordless drill (to simulate a PTO)
- π Extra batteries
- π Toy tractor with ROPS
- π Material to wrap around cordless drill-your cordless drill (old rag suggested)
- π Toy grain wagon with grain/popcorn available at [www.fs4jk.org](http://www.fs4jk.org).
- π toy figure
- π Common household hazardous substances (containers that are empty)
- π Dollar bill, 6-inch ruler or pencil for demo
- π Brain Mold (available at Oriental Trading) or Brain diagram

### **Take Home Packet Options (one per child)**

- π "ABC on the Farm" activity book (available at [www.agfoundation.org/safety/](http://www.agfoundation.org/safety/) )
- π "ABC on the Farm" newsletter
- π Decals (optional)



# ABC ON THE FARM

## *Curriculum Overview*

### Goal:

ABC on the Farm for is an educational program designed to enable students to identify and avoid potential hazards on the farm.

### Specific Learner Objectives:

Upon completion of ABC on the Farm, children will be able to:

1. Identify a power take off on a toy model.
2. State at least one thing that could happen if tangled in a PTO.
3. State at least one reason why it is dangerous to ride on a tractor or other piece of machinery.
4. Name one rule for tractor safety.
5. Name one serious hazard of playing in grain.
6. State at least two ways to exercise caution around all farm animals.
7. Identify three common hazardous substances found in households/farm.
8. Name three rules of lawn mower safety.
9. State three rules of ATV safety.
10. Match three safety slogans to correct topic area.

### Evaluation:

1. Student progress will be evaluated through informal observation of classroom participation, willingness to respond, interest in demonstrations and return of home materials.
2. Evaluation may be based on student response to the above objectives.



## Outline of Presentation:

- I. Introduction
  - A. Discuss farm life
  - B. Discuss purposes of program
- II. Farm Equipment and Machinery Safety
  - A. Tractor Safety
    1. Discuss events depicted in pictures
    2. Identify safety rules for tractors
  - B. PTO Discussion and Demonstration
    1. Identify PTO on pictures
    2. Demonstrate action and hazards of PTO
    3. Discuss other farm machinery and potential hazards
  - C. Grain Safety
    1. Identify equipment illustrated in picture
    2. Discuss consequences illustrated in picture
    3. Demonstration - flowing grain
- III. Animal Safety
  - A. Identify events depicted in picture; protective and unpredictable behavior
  - B. Identify warning signals
  - C. Discuss escape routes
- IV. Hazardous Substances
  - A. Discuss purposes of hazardous substances
  - B. Identify hazardous substances on pictures
  - C. Discuss proper storage and handling
- V. Lawn Mowing Safety
  - A. Discuss picture illustrations
  - B. Apply rules
- VI. ATV Safety
  - A. Discuss size and age considerations of an ATV
  - B. Discuss picture illustrations: rules and regulations
  - D. Discuss picture illustrations: PPE
- VII. Review
  - A. Review main points of each farm safety area
  - B. Video option: "Safety Net"
- VIII. ABC for Kids at Home
  - A. ABC newsletter
  - B. Safety Sense booklet
  - C. Safety sticker or decal
  - D. ABC Activity Book (all available at [www.agfoundation.org/safety/](http://www.agfoundation.org/safety/) )



# I. INTRODUCTION

Objective: *To engage students in active participation in "ABC on the Farm for Kids".*

1. Open with discussion questions:



- How many of you live on a farm?
- How many have friends or relatives who live on a farm?
- How do you feel about living on a farm?
- What are some fun things about living on a farm?
- What does your family do to keep your farm safe?
- Has anyone you know ever been involved in a farm accident? Would you like to explain?

2. Introduce yourself and explain your interest in farm safety.
3. Discuss the purpose of "ABC on the Farm".

As many of you pointed out, a farm can be a great place to be. But, we all know that it can also be a dangerous place to be. Every year in the U.S., around 100 kids are killed. That means that every other day of the school year, at least one child is killed in a farm accident. And about 23,000 kids are injured - that's 65 kids a day - **every** day of the year! How many kids are in your class? In your school? If 65 kids were hurt each day, by the end of the month - everyone in this school would be injured! (*modify as necessary*) Most of the injuries on a farm can be avoided if people know and practice safety rules consistently. I'm here to show you some things that will help keep you and your family safe on the farm.

4. Safety Sam Welcome



Here's our safety mascot and he has a very important message - remember your A-B-C's on the farm - that means Always Be Careful. Now, let's look at some of those safety areas around the farm and talk about how you can avoid being a statistic!



## II-A. TRACTOR SAFETY

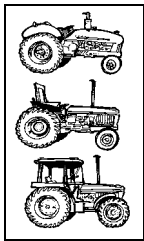
Objective: *To present the dangers of riding on a tractor and determine rules for tractor safety.*

### 1. Discussion questions



- What kinds of machinery can be found on a farm? (*write responses on board. Be sure that you have listed tractors, ATV's combines, augers PTO's and other*)
- Of all the things we've listed here, which do you think causes the most injuries to kids your age? (*Dignify incorrect answers and prompt until you get correct response - tractors, i.e. "The combine does cause serious injuries, but one piece of machinery causes even more."*)

### 2. Tractor styles



- *Discuss differences in the three illustrations*
- *Point out ROPS (Roll Over Protection System) and Cab*
- *Emphasize seat and seatbelt*

The tractor is the leading cause of injury by machinery. Let's take a look at some tractors. You'll find several different styles of tractors depending on how old they are. This one (*point*) is an older model. The newer models have more safety features. This tractor has a **ROPS** (*point*), R-O-P-S (*write on picture or board*), which means **roll over protection system**. These are also called rollbars. If the tractor tips over, the ROPS/rollbar will protect the driver if s/he is in the operator's seat and wearing the seatbelt. This tractor has a cab (*point*), which has a built-in ROPS, but remember - the driver is only protected if s/he is in the operator's seat wearing the seatbelt. Let me show you how this ROPS works.



### 3. Tractor--seat/seatbelt

- *Discuss - No seat means no seatbelt, no seatbelt means no protection.*
- *Almost all machinery has only one seat - for the operator.*

Most people wear seatbelts when they ride in a car. A car is designed to have a driver **and** riders, because there are several seats and seatbelts. But, most tractors have only one seat and one seatbelt. That means they are designed for one person only - and that is the tractor operator. While these models all differ, there is one thing that is the same on all three of them. There is only **one** seat and **one** seatbelt (*point*).

*(Point to top tractor)* Does this tractor have a seat and seatbelt just for you? No, it's not safe to be a rider on that tractor. *(Make large X with overhead marker on top tractor)*

*(Point to middle tractor)* Does this tractor have a seat and seatbelt just for you? No, it's not safe to be a rider on that tractor, either. *(Make large X with overhead marker on middle tractor)*

*(Point to bottom tractor)* Does this tractor have a seat and seatbelt just for you? No, it's not safe to be a rider on any of these tractors. *(Make large X with overhead marker on bottom tractor)* Regardless of what kind of tractor it is, if there is just one seat and seatbelt, the driver is the only person who should be on that tractor.

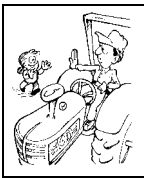
**Note:** To avoid permanent markings, clean the marker off as soon as possible.

### 4. No extra riders



Why do you think this rule is important? What could happen to an extra rider if the tractor hit a rock or turned a corner too fast? *(show picture as kids brainstorm: fall off, hurt yourself, be crushed, etc.)*

A tractor will tip over easier than you can imagine. It can flip completely over in



1½ seconds. Uneven ground, bumps, rocks, sharp corners, hills or ditches: all of these things can cause a tractor to tip. If you are an extra rider, you are going to tip with it! Sometimes people believe that it is O.K. for extra riders to be in a tractor with a cab. But, even if the tractor has a cab, the extra rider can be thrown out the door by a sudden jolt. What should you do if someone says "hop on"? *(show picture of Dad saying "no")*

### 5. Extra Rider Demonstration (optional)

*Demonstrate what happens to an extra rider (use lego man or other symbolic object) during a roll over with tractor models. It can tip sideways or backwards, crushing them, or they can fall off and be run over. Compare to the safer, belted tractor operator.*

As you can see from the demonstration, the fall itself could injure you - break your leg. Worse yet, the tractor could fall on top of you and you would be crushed. Even if the tractor doesn't tip, you could fall off and be run over. There is **no safe place** for an extra rider. Don't do it - no matter what anyone else says or does.



The same rule applies to tractor **attachments or implements** like mowers, balers, plows and sprayers. Is there a seat and seatbelt on a mower? No - don't be mowed over. How about a plow? No - don't be plowed under. Remember, if there is no seat and seatbelt for you, don't ride there.

Many times, farmers mount loaders or buckets on the front of a tractor to haul or load things. The extra weight from a loader can tip a tractor. This is NOT a good place for you to catch a ride! Many children have been seriously injured because they fell out of a loader or the tractor tipped while they were in it. Is there a seat and seatbelt in it? No - don't kick the bucket - NEVER ride there!

## 6. Summary & Slogan

One of the biggest hazards for children your age is the tractor. There are two ways that most children are injured or killed by tractors. One is being an extra rider and falling off the tractor. The other is being an extra rider on a tractor that rolls. Even if the tractor has a cab, it's not safe to ride along when there is no seat and seatbelt just for you. **Being an extra rider on ANY tractor is dangerous.** Don't ask to ride!



*Safety Sam says, "No seat - no rider!"*



## II-B. POWER TAKE OFF

Objective: *To demonstrate the operation of the PTO and discuss associated dangers.*

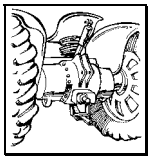
### 1. Discussion questions:



Many times you'll see a power device connected to the back of the tractor. It's called a PTO.

- What does PTO stand for?
- What does a PTO do?
- What equipment on your farm uses a PTO?

### 2. PTO shaft



- *Describe PTO and PTO shaft*
- *Point out that some PTO's are shielded*

The PTO is a powerful device or shaft that is connected to the back of the tractor. (*point or ask a student to point*) It attaches to other machines to make them work, or give them power. The PTO is very powerful and very dangerous. It turns fast, so for protection it should always have a shield to keep things from getting caught in it. The shield looks like this (*show picture*).

### 3. Demonstration - PTO Rpm's

- *Injuries happen quickly*

Now, when I say powerful, I mean it! What is the fastest thing you can do? How about blinking your eyes? I'll give you one second to see how many times you can blink your eyes. (*Say "go" and "one thousand one -stop". Kids count their blinks - should be no more than five. You can also have one student count another student's eye blinks for more accuracy*)

O.K., **you** can blink **5 times** a second. A **PTO** rotates at least **9 times** per second. That's fast! It is much faster than anything you can physically do with your body. You can't even blink 9 times per second. In fact, it moves so fast you can't react fast enough to get out of the way.

You will never be faster or stronger than a PTO. It will grab anything near it, like a string from a hooded sweatshirt, a strand of hair, a sleeve, loose or ripped clothing. When those things become tangled, so do you! The PTO can instantly pull your body in. Many people have lost arms, legs and have even been killed because of PTO entanglement. You just can't react fast enough to get away in time. We call this reaction time.



#### 4. Reaction time demonstration

- *Explain reaction time*
- *Choose a volunteer*
- *Place the center of a dollar bill, 6 inch ruler or pencil between a child's fingers. Tell him/her to try and catch it when you drop it.*

So, what is reaction time? (*Allow time for response*) Right - it's the time it takes for your brain to tell your body what to do. Now, let's see how it works. Who's the fastest kid in here? All right, (*name*) is going to try to grab this dollar before it passes through his/her fingers.

*Place the center of a dollar bill, six inch ruler or pencil between the child's extended thumb and fingers. Try to catch him or her slightly off-guard when you drop it, because accidents happen when we're slightly off-guard. Oops! There goes an arm! What would it be like if you had only one arm?*

*Ask kids to untie their shoes or unbutton a couple of buttons. Next, ask them to hold one arm behind their backs and tie their shoes with only one arm. To make it even harder, choose to "lose" the dominant arm. Even missing one thumb makes routine tasks difficult. Try buttoning, writing or cutting without the use of a thumb.*

*If students ask for a second chance, tell them the PTO doesn't give second chances! We always think we can get out of the way fast enough, but we can't!*

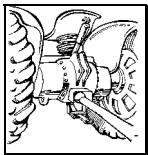
#### 5. Demonstration of PTO

- *Describe PTO and demonstrate it's action using a cordless drill and a rag*
- *Discuss clothing considerations*
- *Emphasize: STAY AWAY FROM MACHINERY!*

Let's see just what happens when a PTO is working. When I turn the power on, the shaft begins to move. Now watch what happens if a shoelace gets tangled. Can you think of anything else that could get caught? (*loose clothing, sleeves, hair, hood strings, ripped coveralls*) Remember how fast a real PTO moves? It rotates too fast for you to react. Before you know it, you're caught and could be seriously injured or killed. Never try to duck under, step over, or reach across a PTO shaft. Just STAY AWAY from all machinery with moving parts.

**Note:** During the PTO demonstration, if you have the wagon with the box up, caution about playing under or around the truck box. The hydraulic system might fail and the box will drop. Otherwise, discuss during grain safety.

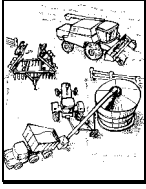
#### 6. PTO Shields



There is something you can do to make your PTO safer. Most people put a shield around it. (*point*) It covers the shaft and keeps things from getting tangled - or mangled! These shafts are not that expensive - especially considering that they save lives. Is your life worth a hundred dollars? You bet it is!



## 7. Picture #4 - Assorted Machinery



- Discuss other machinery that uses a PTO
- Discuss dangers associated with all farm machinery/equipment such as augers, balers, etc.
- Encourage them to have their parents show them the equipment/PTOs on the farm.

The PTO is dangerous in itself, but the machinery that it powers has many dangerous moving parts as well. Does anyone see the **auger** on this picture? Augers are a big help to farmers who need to handle grain. Augers move the grain between trucks and bins. Could you imagine how hard it would be to move all that grain by hand? Unfortunately, machinery like this - that is powerful enough to reduce our work - is also very dangerous.

An auger has **moving parts** that are dangerous. These moving parts move the grain - we call it bubbling grain. It is tempting to touch it - either to just feel it or unclog it. But the auger is just like a corkscrew with sharp blades that rotate quickly. **NEVER** stick your hand into a moving auger for any reason. You could suffer amputations, serious cuts or broken bones. An auger can cut off your finger, hand or arm and throw it five feet in one second!

When it's time to harvest the crops, what kind of machinery do we use? The **combine** is a life saver when it is time to harvest. But, it can also be a life taker! That is because the combine is big, very powerful and has many moving parts. All of those moving parts should have (*pause - wait for students to respond*) yes, shields.

Another hazard of combines is that they are very loud. Why would this matter? Let's say someone approached a working combine - maybe to give the operator a message or some lunch. But, it is very difficult for a tractor operator to see anyone. So, let's say the driver didn't see the person and the combine was moving toward him/her. That person gets scared and starts screaming at the driver to stop. Do you think the driver will hear him/her? No! The **driver cannot see or hear other people** when operating the combine. Don't get anywhere near one.

## 8. Summary &amp; Slogan

One of the most powerful pieces of equipment on the farm is the PTO. We use it with many other machines to do lots of different jobs. These machines and the PTO are very dangerous because they are big, noisy and have lots of moving parts. Ask your parents to show you the equipment/PTO on the farm. Remember, farm injuries happen fast!



*Safety Sam says, "Kids don't go near a PTO."*



## II-C. GRAIN SAFETY

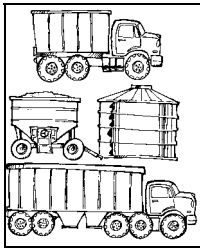
Objective: *To demonstrate the dangers of flowing grain.*

### 1. Discussion questions



- Does anyone live on a farm where wheat or other grain is grown?
- How many of you have grain wagons or trucks on your farm?
- Are there other places where grain is stored on your farm?

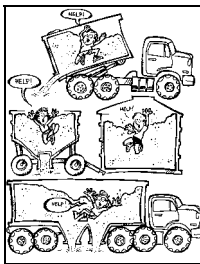
### 2. Grain equipment & storage



- *Discuss various grain equipment illustrated.*

The pictures you see here show several types of grain equipment that you would see on a farm. (*Point and identify each illustration.*) They don't look dangerous, but they are! Some of them release grain from the bottom (*point to wagon & bin*), others from the back (*point to truck*). Even standing grain can be dangerous.

### 3. Flowing grain



- *Point out what happens to the person in each example.*

These pictures show what happens when the grain is being released. Now, if you are working or standing in grain that starts to flow, you could be trapped very quickly. It grabs at your body like quicksand. It only takes 3 - 4 seconds to become trapped, and in 8 - 10 seconds, you can become totally submerged. You are in trouble before you realize what is happening! Standing grain is dangerous, too. One boy suffocated after he asked his friends to cover him with grain. Never play or ride in grain wagons, grain trucks, hopper bottom semi-trailers, grain bins, or any type of grain or feed storage area.

### 4. Demonstration of flowing grain

- *Discuss "gravity"*
- *Demonstrate the movement of flowing grain*
- *Point out the possibility of drowning*



Who knows what gravity is? Yes, it's a force that pulls everything to the earth. Well, gravity also helps us work on the farm. It helps pull the grain down and out of the trucks/storage areas. If you are in the grain, it will also pull **you!** I have a grain wagon here to help me show you how you can be trapped and suffocate in flowing grain. Watch what happens to the person when the corn is unloaded from this grain wagon.

*Use a model Plexiglas grain wagon filled with popcorn for this demonstration. Place a small figurine in the corn. Ask a student to release the corn while someone times the demonstration. Use a second hand or count the seconds out loud until the figure is covered.*

Wow! Only \_\_\_\_ seconds and he was completely covered. Don't let this happen to you!

The same thing could happen if you were on top of a gravel or sand pile at a construction site. If someone started to unload that pile, you would be pulled in and trapped.

## 5. Summary & Slogan

Remember, whether it's flowing or standing, grain can be very dangerous. Don't take chances - never play or work in the grain!



*Safety Sam says, "**DON'T** go with the flow!"*



## III. ANIMAL SAFETY

Objective: *To establish safety rules about farm animals.*

### 1. Discussion questions



- Does anyone in this room have a pet?
- How do you treat your pet?
- Does anyone have a mother cat or dog?
- How do you treat these animals when you're around them?

### 2. Protective and Territorial Behavior

If you were baby-sitting your little brother or sister at the park, would you let a stranger approach him/her? Of course not! You don't know that person, or what they might do.

What if you were at that park with your family and someone started harassing you - poking you with a stick or snapping you with a whip - what would your parents do? Same thing, right? We're all **protective** of the people we love. Animals are the same way with their babies.

### 3. Cow and calf



- *Discuss action in picture*
- *Relate behavior to other animals*

What could possibly be dangerous about a cute little newborn calf? This mother cow - and any animal with a newborn should be considered dangerous. They will be very protective and do anything to keep others away. This behavior, known as "maternal instinct" is very strong in all animals. If they believe their babies are being threatened, they will bite, kick and butt. It's not a good idea to approach them - you could be seriously injured if an animal perceives you as a threat to her baby.

How many of you have your own room? Do you like it when someone goes in without permission? No. You might be upset because that is **your** territory. Animals are also protective of their food supply and the area in which they live - like you are of your room. We call this territorial. The difference is, animals aren't quite as civilized as you - there's no telling what they might do to someone who enters their territory!

#### 4. Unpredictable Behavior, Danger Signs and Warning Signals

When you feel sick, stressed out or tired, how do you act? (*allow responses*) Do you like having people around when you feel this way? We don't always act normally when we feel overly tired or stressed. We might lash out, snap at somebody or "bite their head off". Animals, like people, can be very **unpredictable** when they feel threatened, are sick or under stress. You can't always tell how they'll behave. We don't know when they're having a bad day or feeling sick, do we? Many large animals respond unpredictably to stress by biting, kicking, trampling, or butting. Don't let an animal "bite your head off"! Some other things that cause stress and unpredictable behavior are:

- **Approaching from the blind spot.** Who knows what the blind spot is? All animals have peripheral vision, including humans. But, there are some places we can't see. Would you like to see where your blind spot begins? I need a volunteer to demonstrate.

*Partners face each other, about 6' apart. Partner A chooses a spot directly ahead on the wall. S/he is to keep his/her vision locked on that spot. Partner B tosses a ball to play catch with Partner A. With each toss, Partner B moves one step to the side in an arc until Partner A can no longer see or catch the ball. The class can partner up and try this brief activity.*

Did you notice when you could no longer see with your peripheral vision? Yes, our vision stops about right here (*point to side of ball*). But, cattle can see almost all the way around them because their eyes are on the sides of their heads. We call this panoramic vision. There is only one spot - directly behind them - where they cannot see. This is called a blind spot. (*point to back of ball*) If you approach them from that blind spot, they'll try to protect themselves and they'll kick you. You should always approach an animal from the side, where they can see you. (*point*)

- **Entering their flight zone.** When someone invades your space (*demonstrate if you wish*) or "gets in your face", you naturally want to back off or move away. So do animals. This flight zone varies for different animals.
- **Disturbing their routine.** Both large and small animals develop strong habits. They might eat or sleep at the same time everyday. If we stick to their routines, they will be easier to work with and remain calmer.
- **Separating them from the herd.** They feel better when they're part of a group. They depend on the social relationship for security and comfort. You'd probably rather hang out with friends than all by yourself, too, right?
- *Move casually toward an unsuspecting student and make a very loud noise, either by shouting or slamming something down to catch them off-guard. Oh, sorry. Did I spook you? Hearing in animals is highly developed. They're sensitive to **noise** and easily "spooked" - just like you.*



## 5. Raging bull



How can you tell if an animal is stressed? What kinds of signals would they give? Even though animals can act unpredictably, they do give us little hints that they aren't happy! A cat's ears will flatten or it might hiss. A dog will growl. Large animals also give warning signs: (*point*) raised or flattened ears, tail tucking, bristled hair on the back or head, bared teeth, snorting, stomping, pawing the ground and kicking. When working with animals, you must always be alert and when you see any of these signs, you'll know that its time for you to get away. One small warning signal may be all you get!

## 6. Demonstration - Escape Routes

*As you explain this concept, make your way to the back corner of the room away from the door. Using the classroom area as a pen, the door as the gate/escape and the class as the animals, point out to the students that you have placed yourself in the most dangerous position. Reposition yourself closer to the door until you have a clear escape route.*

Before you ever step in a barn, pen, corral or fenced area, there is something you should **always** do. Does anyone know what that is? You should always have an **escape route** planned. How will you get out of there if an animal charges you? Don't ever let yourself get boxed-in or trapped without an escape route. Make sure that the animal doesn't get between you and that escape route. (*at this point you should be at the far corner of the room*)

Now, what if this classroom was a corral and you were the animals. How could I get to the door? Oops, I'm not in a very good spot, am I? I let the animals get between me and my exit! (*return to a position where you have immediate access to the door*) There. Now I can get to my escape route without going through the animals!

## 7. Summary & Slogan

When we raise farm animals we get used to being around them every day and even think of them as pets. Remember, animals can be protective and unpredictable. To handle animals properly and prevent injury, remember these safety tips:

- Treat all animals kindly and with respect.
- Plan an escape route when in an area with animals.
- Stay away from an animal's food and territory.
- Stay away from frightened, sick or hurt animals.
- Remember that animals need their routines to feel comfortable.



*Safety Sam says,*

***"It makes sense to stay outside the fence"***



## IV. HAZARDOUS SUBSTANCES

Objective: *To recognize and avoid common poisonous substances found in the household and on the farm.*

### 1. Discussion questions



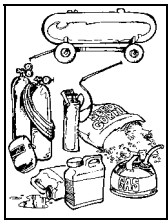
- Does anyone help clean around the house?
- What kind of jobs do you do?

### 2. Demonstration: Household Hazards

- *Display common household substances (ammonia, detergent, furniture polish)*
- *Discuss their usefulness*
- *Discuss their poison content*

I'm sure you recognize some of these products. People use them to clean house. Maybe you've even used some of them yourself. They can all be very helpful when you're doing a job. But, they can also be dangerous.

### 3. Hazardous substances on the farm



- *Identify hazardous substances around the farm*
- *Discuss the dangers*
- *Determine how to avoid contact*

There are many hazardous and toxic materials that may be used around the farm in the same way household cleaners are used around the house. Can you name some of them? (*Point to crop chemicals, treated seed, fertilizer, anhydrous ammonia, gasoline, pipeline cleaners, and disinfectants*) Farmers need these materials but they can be very dangerous if they are not used properly. Farm chemicals can be inhaled, ingested or absorbed through the nose, mouth, eyes and skin. If you drink or eat them, you will get very sick. Some are also dangerous if your skin comes in contact with them or if you breathe them. They can burn your eyes, skin and lungs.

Personal protective equipment is designed to block chemical contact with the body and will reduce the risk of contamination. The adult who handles hazardous substances should be properly trained and dressed in coveralls, boots, goggles, rubber gloves and a respirator. The best way to avoid these dangers is to stay away from the hazardous materials at all times. Don't touch or play with empty containers. There is no reason to be around them at all! They should be handled by adults only and kept locked up and out of reach.

#### 4. Summary & Slogan

The materials we use to work and clean around the house and farm have very important jobs. They can also be very dangerous and should be handled by properly trained adults only. Even adults have to keep going back to school - they must take a refresher course in pesticide use every couple years.



*Safety Sam says,*

***“Kids and Chemicals  
don’t mix”***



## V. LAWN MOWING SAFETY

Objective: *To establish procedures for safe mowing.*

### 1. Discussion questions



- Does anyone help out by mowing the lawn?
- Tell me some things you do before you mow.
- How do you dress?
- Who knows some rules of safe mowing?

### 2. Correct/incorrect mowing procedures



- *Discuss illustrations*
- *Point out safe procedures*
- *Emphasize: If children are not mowing now, you are not encouraging them to do so. Parents will decide when their children are ready to mow.*

The most common cause of amputation to young children is due to lawn mower injuries. There are many good rules for mowing safely which, when followed, will prevent those injuries. How many do you know?

- Always be supervised by an adult while mowing.
- Read operator's manual and become familiar with the controls.
- Wear proper clothing - sturdy shoes and gloves.
- Before mowing, make sure that the area is clear of debris and people.
- No extra riders!
- Keep hands and feet well away from the mower blades.
- If mower becomes plugged, disengage the mower, turn engine off, remove the key and wait for an adult to help you.
- Always move a push mower forward. Don't pull it back toward you.
- Mow across an incline with a push mower; up and down an incline on a riding mower.
- Operate garden tractors or riding mowers at safe speeds.
- Always look behind you before you back up on a riding mower. Someone might be there.

### 3. Slogan



*Safety Sam says,*

***"Know how to mow  
and go slow!"***



## VI. ATV SAFETY

Objective: *To identify safe practices of the ATV.*

### 1. Discussion questions



- How many of you have seen an ATV?
- What does ATV stand for?
- What is the purpose of an ATV on a farm?
- Can you name other jobs in which an ATV could be used? (forest service, police patrolling, military, rescue operations)

An ATV, which stands for All Terrain Vehicle, can be very helpful on the farm, but it can also be very dangerous. The Consumer Product Safety Commission conducted an injury survey for ATV's and found the three most common reasons for injuries to young people are:

1. unsupervised riding
2. not wearing helmets
3. riding an adult-sized ATV

Many children are also injured while riding double. There are many things to consider before you begin driving one - including your size and age. *Verify the ATV requirements in your state before proceeding.* There are also laws regarding ATV's - just like there are laws for driving cars. There are training courses you can attend and in some states you can get a home study course. You can contact your state Safety Council for information on ATV training courses.

### 2. Age and Size Considerations

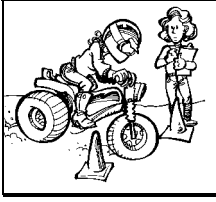
How many of you think you could safely drive an adult sized ATV? Even if you're old enough, you must make sure that you're big enough; your size has to fit the ATV size.

Why do you think your **size** is important? If you are the right size, you will be able to control the ATV. Can you reach all of the controls? Can you turn the handlebars all the way to each side? Do you have some extra room so that you can shift your body to balance the ATV? If not, the ATV will control you, instead!

How many of you think you could lift this (*point to object in room that weighs at least 400 lbs., such as a loaded filing cabinet*)? An ATV weighs at least 400 pounds. There is no person in this room that could lift that much by themselves. If your ATV tipped and pinned you underneath, you would not be able to push it off of your body. Many kids have been crushed to death in this way. So, you can see why your size and **strength** are so important in deciding when you are ready to drive an ATV.



### 3. ATV Rules & Regulations



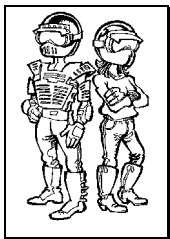
Does an ATV have a seat for an **extra rider**? No - and you know what that means. You are not safe as a passenger. An ATV is designed for one person only - the driver. Extra riders throw off the balance and make the ATV difficult to control. Do not accept an invitation to ride along and do not extend an invitation to give a ride. Too many people have been injured or killed this way. *(point to picture of extra rider on picture)*

*(If children respond by saying the seat is big enough for two people, explain that the seat is designed for adults, who need more room, and to provide extra room for shifting the body to control the machine)*

When you are old enough to drive an ATV, here are some things you need to know:

- You should never drive an ATV on public or paved roads. In fact, it is illegal to drive on public roads. ATV's are designed to be used in off-road conditions. *(point to picture)* Drivers should make sure they operate ATV's in familiar territory. Before driving in a new area, check for potential hazards, like holes or hidden obstacles. Be sure that you **respect the environment** around you.
- You should take an ATV **training course** before you begin driving one. This is not the training course. You should feel completely comfortable and in control. *(Point to picture. Provide your local training schedule if available.)*
- **Tell your parents where you are going** in case the ATV quits or you have a crash *(point to picture)*.
- *(Point to picture of small child on large ATV)* What's wrong with this picture? Right - this child is too small to control this ATV. He can't even reach the handlebars.

### 4. Personal Protective Equipment



When you are old enough to drive an ATV, remember that if you want to have a fun drive, you need to have a safe drive. Here is some of the equipment you should always wear to protect yourself in the event of an accident.

A **helmet** *(point)* is a must - and it needs to be the right kind and fit properly. You can't just find some old football helmet your brother used to wear. This helmet has been approved by the Department of Transportation. If you have an accident, the helmet will protect against head injuries. Any helmet that

has been worn during a previous accident will need to be replaced.

A head injury can change your life forever – if it doesn't kill you. I brought a brain along for you to look at. *(Take out "gelatin brain" or your brain diagram)* What would happen if you damaged or killed this part of your brain: *(if using gelatin brain-tear pieces off as you discuss)*

- left front brain (*temporal cortex*) - may lose your speech or ability to understand others
- back right (*occipital lobe*) - may lose vision or ability to recognize things around you
- outside surface (*neo cortex*) - won't be able to reason or solve problems
- middle, deeper (*motor cortex*) - won't be able to move
- front (*frontal lobe*) - you won't know how to act socially; how to be or make friends



It's pretty obvious why the helmet is the most important piece of PPE, isn't it?

These **goggles** (*point*) or a face shield will protect your eyes from flying debris or branches that may be in your way.

Leather/off-road **gloves** (*point*) like this will help keep your hands from getting sore or cold, and offer protection from scrapes and cuts if an accident occurs.

You should wear leather **boots** (*point*) that come over your ankles and the higher the better to protect your legs. Your gym shoes, athletic shoes or sandals won't be enough protection.

It's also important to wear **long sleeved shirts and pants** (*point*) to protect your skin from scrapes, tree limbs, etc.

## 5. Summary and Slogan

An ATV can be an extremely valuable piece of equipment on the farm. It can also be great fun. Before you can drive one, though, you must be old enough, big enough and smart enough! That means a training course and following the rules of the road.

*Safety Sam says, "You're asking for trouble if you ride double!"*



## VII. REVIEW

Objective: *To reinforce content of safety areas.*

### 1. Discussion questions



Today we talked about life on a farm and how much fun it can be if we're careful.

- What kinds of jobs do we do on farms?
- What kinds of things do kids like to do on farms?
- What is your favorite thing about living on/visiting a farm?

### 2. Review areas

- *Review each topic area of ABC program*

The farm is your home but it is also a work place. We need powerful equipment to do lots of jobs. We use many helpful materials that could be dangerous if not used properly. We must always be careful and help others be careful, too.

### 3. Review Safety Sam's Slogans

- *List Safety Sam's rules of farm safety*

Let's review each farm safety area we talked about today. What do you remember about.

Tractors? *(No extra riders, driver should wear seatbelt!)*

PTO? *(Stay away, you can't react fast enough, shields on all moving parts of machinery!)*

Grain Safety? *(Don't work or play in grain; you could be pulled in and drown)*

Animals? *(Animals are protective and unpredictable. Respect them and plan an escape route.)*

Hazardous Substances? *(They should be locked up and handled by trained and properly clothed adults.)*

Lawn Mowing Safety? *(Before you mow, learn all safety rules.)*

ATVs? *(Before driving an ATV, you should be old enough, big and strong enough and take a training course.)*

When we remember these simple rules, we can have a great time on the farm. We can enjoy the animals and watch the crops grow. There are many fun things to do on the farm.



*Safety Sam says, "ABC on the farm. Always be careful!"*



## VIII. ABC AT HOME

Objective: *To further education with the families.*

### 1. ABC Take Home Materials

- *Decide what you want to send home to reinforce what you taught the students*
- *If you send home decals, encourage application with parental supervision*
- *Check out items available at [www.agfoundation.org/safety/](http://www.agfoundation.org/safety/).*

### 2. Present Certificates

Consider presenting each student with a certificate that indicates they were a participant in the Always Be Careful on the Farm Program.

*This was created by North Dakota Farm Bureau to raise awareness of safety issues. It does not replace the responsibility of the adult made decisions that should be in place to provide a safe environment for children.*

