



## OBJECTIVE

Learn about the specific hazards on a working farm and how to recognise the various safety signs used.

## GETTING STARTED

### 1 KNOW THE FARMYARD – DO YOUR FARM SAFETY CHECKLIST

Before visiting a farm, outline what the children ‘Need to Know, Before they Go!’ Invite one child to be farm safety officer who has to tick off each question as it is answered.

- A Who are you going with**
  - a. Reinforce the message ‘We never visit a farm alone’.
  - b. Why do we not visit a farm alone?
- B What kind of farm are you visiting**
  - a. Speak about the different kinds of farms there are.
  - b. What will you see on these farms?
  - c. What kind of dangers might there be on the farm you are visiting?
    - i. Animals / Machinery / Chemicals
- C Are there big jobs planned on the farm that day**
  - a. If so ask the children why we don’t visit a farm during busy times.
  - b. What kind of big jobs might be on a typical farm (bringing in silage, moving animals, mixing slurry).
- D What will you wear**
  - a. Your boots (not roller skates, or high heels, or heellies!!)
  - ii. A coat if it is cold or rainy.
  - iii. A hi vis vest.
- E What kind of warning signs you will see**

See if children are aware of the various signs they may see while on the farm. If not remind them by leading conversation to the ‘Know the signs’ chart below.

### 2 KNOW THE SIGNS

Use the guide below and hand signals to help the children learn about the colours and symbols used on safety signs.

| SIGNS – KNOW YOUR COLOURS AND SHAPES  |                                      |                                   |  |   |
|---|--------------------------------------|-----------------------------------|--|---|
| SHAPE   | MEANING                              | COLOUR                            | EXAMPLE  | HAND SIGNAL   |
| <br>Circle with a diagonal bar | Prohibition<br>(no, stop, do not go) | <b>Red</b><br>(White contrast)    | <br>Children do not cross |  |
| <br>Blue circle                | Mandatory<br>(You must, you have to) | <b>Blue</b><br>(White contrast)   | <br>Wear eye protection   |  |
| <br>Triangle                   | Caution / Warning                    | <b>Yellow</b><br>(Black contrast) | <br>Danger - Flammable    |  |
| <br>Square/rectangle           | Safe area or condition               | <b>Green</b><br>(White contrast)  | <br>Safe area to assemble |  |

### 3 AROUND THE FARM

On a blackboard list the following 'Farm Yard 'Zones'. The Chemical Shed; The Slurry Pit; The Animal Pen; The Field; The Shed, (eg. hay shed, machinery shed, etc)

Now ask the children to mention some of the dangers they might find in each zone. The prompts below will help with your discussion. Finish off by familiarising the children with the safety signs used in each area.

| THE FARM YARD ZONES   | STAYING SAFE   | WHAT SIGNS?   |
|---|--|---|
| <p><b>The Chemical Shed</b></p> <p><b>The statement:</b><br/>Farmers use many different chemicals and products to help them on their farms.</p> <p><b>The questions:</b></p> <p>a) What types of chemicals do farmer's use and why?<br/>b) Why are they dangerous?</p> <p>! Pesticides: These get rid of the 'pests' on farms. For example:<br/>→ Rodenticide: Used in bait boxes to keep rats and mice away.<br/>→ Herbicide: Weedkillers<br/>→ Fungicide: Fights diseases on crops<br/>→ Insecticide: Kills lice and flies on animals which can be harmful to animal's health.</p> <p>! Fertilizers – help crops to grow<br/>! Oils / diesels - for machinery<br/>! Disinfectants - keep yard clean and hygienic especially in areas with animals and young animals.<br/>! Animal medicines</p>                     | <p><b>The Dangers</b></p> <p>Some of these chemicals are toxic or poisonous.</p> <p><b>Q:</b> How do you know if something is dangerous to touch or smell?</p> <p><b>A:</b> The label may read "caution," "poison," or "danger."<br/>Chemicals may cause death or serious injury in different ways –</p> <ul style="list-style-type: none"> <li>! Inhalation (breathed in) – asphyxiation.</li> <li>! Ingestion (swallowed) - poisoned</li> <li>! Absorption (soak into skin or eyes) – burnt skin</li> <li>! Fire hazards</li> </ul> <p><b>Staying safe:</b></p> <p>If working with chemicals, farmers must wear the correct clothing and safety accessories:</p> <ul style="list-style-type: none"> <li>! Overalls</li> <li>! Gloves</li> <li>! Face Masks</li> <li>! Boots</li> </ul> <p>Keep all chemicals in a room which must be locked with a warning sign on the door.</p> | <p><b>WHAT SIGNS?</b></p>                                    |
| <p><b>THE FARM YARD ZONES</b></p>   | <p><b>STAYING SAFE</b></p>   | <p><b>WHAT SIGNS?</b></p>   |
| <p><b>The Slurry Pit</b></p> <p><b>What is slurry?</b><br/>(always a fun question to ask!!)</p> <p>a) Slurry is the name given to the mixture of manure and urine produced by farm animals such as cattle and pigs.</p> <p>b) It's used by farmers to fertilise their grass and is typically stored in a slurry tank or a slurry pit.</p> <p>c) Slurry is kept on a farm in a tank or a pit. Some pits, (slatted pits) are indoor and the poo is gathered underneath the sheds from animals over the winter months. During agitation of these pits all animals must be taken out.</p> <p>d) Farmers can only spread slurry at certain times of the year. Under a rule called the Nitrates Directive, slurry cannot be spread over the winter so as to protect ground and surface water, including drinking water.</p> | <p><b>The Dangers</b></p> <ul style="list-style-type: none"> <li>! Risk of drowning and</li> <li>! Poisoning by toxic gases.</li> </ul> <p><b><u>Drowning:</u></b></p> <p>Slurry is kept in a tank and is made up of solids and water, this makes it a drowning hazard and it must be fenced off to ensure no people or animals falls in.</p> <p><b><u>Poison gas:</u></b></p> <p>Hydrogen Sulphide is the name of the toxic gas in slurry! Just one lungful of this gas can be fatal. Slurry gases are produced by the bacteria formed during the decomposition (break down) of the slurry. Other gases produced by slurry are Carbon Dioxide (CO<sub>2</sub>), methane and ammonia.</p> <p>These gases are released during the agitation (mixing) process.</p>   | <p><b>The Signs</b></p>   <p><i>Outdoor slurry tank</i></p> |

e) The process of mixing slurry is called **Agitation**. This allows all the nutrients that have settled on the bottom of the tank to be churned up and it breaks the hard crust that can form on the surface. But it can be extremely dangerous as deadly gases can be released.

The first 30 minutes of agitation are the most dangerous as this is when the highly toxic Hydrogen Sulphide is at its strongest. Farmers should leave the area once agitation starts and not return for at least 30 minutes!

#### Staying safe:

There are certain rules and tips all farmers should follow when mixing slurry!

- ▮ Mix slurry on a windy day so to help the gasses blow away!
- ▮ Make sure all animals have been removed from the building
- ▮ Keep all doors and windows open
- ▮ Start the mixer and stay out of the building for at least 30 minutes as this is when slurry gases are at their highest levels (longer depending on the tank size)
- ▮ No children should be present when farmers are mixing their slurry

**Tip: a great way to explain how gas is released during agitation is to shake a fizzy bottle and open it slowly so the children can hear the gas escape!**



Agitating Slurry



Spreading Slurry

## THE FARM YARD ZONES

### The Sheds

**The question:**

**What are the sheds?**

**What are they used for?**

**What are the different types of shed?**

Sheds and outbuildings are very important on a farm. They house and protect many aspects and outputs of the farm. We have already covered off chemical storage so here are other types of shed on a farm:

- ▮ Grain storage
- ▮ Hay and straw bales
- ▮ Animal pens
- ▮ Machinery storage
- ▮ Machinery repairs
- ▮ Animal feedstuffs
- ▮ Chemicals

## STAYING SAFE

### The Dangers

- ▮ Falling from bales
- ▮ Falling through a roof
- ▮ Items falling from overhead
- ▮ Fire

#### Falling:

Bales, pallets and tyres are often very wobbly and can easily fall.

A falling bale or tractor tyre can weigh as much as several grown adults.

Extra care must also be taken when fixing rooves – they may not be able to support an adult's weight. Using a hydraulic crane will protect farmers from falling through rooves during repair work.

#### Staying safe:

So stay away from ladders and bales, pallets, tyres or anything else that you might find piled up on the farm.

Never try to play on old swings – the ropes may be rotted and dangerous.

Farmers should make sure that ladders are tidied away and not causing any unnecessary temptation.

Farmers should remove old rope and tyre swings from their farm sheds.

**Beware of any moving machinery or machinery parts in a shed, such as a PTO which can cause entanglement.**

## WHAT SIGNS?

### The Signs



| THE FARM YARD ZONES   | STAYING SAFE  | WHAT SIGNS?   |
|---|---|---|
| <p><b>The Animal Pen</b></p> <p><b>The questions:</b></p> <ol style="list-style-type: none"> <li>1. What kind of animals are on a farm?</li> <li>2. What animals may be in the pen / shed?</li> <li>3. What are the animals used for?</li> <li>4. Can the animals also be outdoors?</li> </ol> <p>Typical animals housed indoors are:</p> <ul style="list-style-type: none"> <li>▫ Cattle</li> <li>▫ Horses</li> <li>▫ Sheep</li> <li>▫ Pigs</li> <li>▫ Chickens</li> <li>▫ Bulls</li> </ul> <p>Many farmers will keep animals indoors at different times of the year. In spring time many sheep and cattle are indoors as they prepare to give birth.</p>   | <p><b>The Dangers</b></p> <p><b><u>Animals &amp; Young:</u></b></p> <p>Birth time is a very stressful time for the animals and farmers have to be extremely careful around those animals who are likely to attack while protecting their young.</p> <p><b>Did you know:</b> Freshly calved cows can cause more accidents on farms than a bull!</p> <p><b><u>Medicines:</u></b></p> <p>Some animals may require some medicines, never touch any bottle that you may see in a shed. Always tell an adult if you see any that may be there by accident.</p> <p><b><u>Bulls:</u></b></p> <p>Bulls are very territorial creatures, this means they protect their pen or their field and don't like anyone getting too close.</p> <p><b>Staying safe:</b></p> <p>Keep back from animals and their young especially in the early days since birth.</p> <p>Never enter a pen or field with a bull!</p> <p>Wash your hands every time you are touch an animal. Zoonosis is the spreading of disease from an animal to a person, handwashing can prevent the spread.</p> <p>Farms set up footbaths to disinfect shoes and boots which prevent diseases spreading amongst groups of animals.</p> | <p><b>The Signs</b></p>    |
| THE FARM YARD ZONES   | STAYING SAFE  | WHAT SIGNS?   |
| <p><b>The Fields</b></p> <p><b>The question:</b></p> <p><b>What are the fields used for?</b></p> <p>On a farm the farmer has many uses for their land!</p> <ul style="list-style-type: none"> <li>▫ Feeding animals</li> <li>▫ Growing crops for humans</li> <li>▫ Growing animal feeds</li> <li>▫ Growing animal bedding</li> <li>▫ Orchards for fruit growing</li> </ul> <p>They also add to the scenery and sometimes you can be lucky to be able to enjoy a picnic or a walk – but always make sure you have permission!</p> <p>Never leave a gate open after going into a field. The rule of gates is that if it was open when you got to it, leave it open. If it was closed when you got to it, close it behind you.</p> <p>It is never safe to climb over fences, or to go into fenced off areas. They are fenced off for a reason!</p> | <p><b>The Dangers</b></p> <p><b><u>Animals:</u></b></p> <p>Never enter fields where there are animals and their young.</p> <p>Bulls are extremely dangerous and should be avoided at all times.</p> <p><b><u>Electricity:</u></b></p> <p>Can you recognise electric fences by their wires, and the subtle clicking sound? Never touch an electric fence!</p> <p>Electrical cables on telegraph poles can be dangerous. Avoid playing with kites near overhead cables, and avoid using fishing rods near overhead cables. If a there is a broken cable on the ground, never approach it and call the electricity company immediately.</p>  | <p><b>The Signs</b></p>    |



### **Water:**

Ditches, drains, water troughs, ponds, rivers or streams may be present in the field. Do not approach in case you slip and fall.

### **Staying safe:**

- ! Look out for signs that warn you of any dangers.
- ! Stay out of fields that have a bull or cows with young calves grazing.
- ! Never enter a field that is not your property, this is trespassing.
- ! Be careful of the fencing such as barbed wire and electric wire on their fences - you could get cut or get a nasty shock!
- ! If you open a gate, always close it after you!



Source: [esbnetworks.ie](http://esbnetworks.ie)

## **Follow on activities:**

Now test what you know with some farmyard & field safety activities, such as.....

- Make your own farmyard scene for your classroom and make safety signs and for the various zones!
- Check out our white board and PC games: *Farm Yard Safety*, *Off to Work* and *Follow the Signs*.
- Download and fill in our '*Spot the Dangers*' worksheets.
- Colour and cut out the *Farm Safety Signs*

