MODULE 4
WORKING SAFELY WITH MACHINERY

Introduction:
The purpose of the lesson is to begin to learn English skills that will be useful at work and to understand the hazards of working with machinery. This lesson will build upon the language skills and content workers learned during the last lesson.

Language Objectives:
» Workers will identify and use personal pronouns in English
» Workers will use the present tense of the verb 'to be'
» Workers will be able to form ‘Is/ Are there’ questions

Safety Content Objectives:
» Workers will identify machinery commonly used in dairy
» Workers will identify hazards associated with machinery in dairy
» Workers will identify safe practices to help prevent injuries when using machinery

VOCABULARY

| Bunker Silo | Wheel |
| Barn       | Tire  |
| Skid Steer | ROPS (Rollover Protection System) |
| Tractor    | PTO (Power Take-off) |
| Seat Belt  |         |
| Bucket     |         |

| Ear Plugs | Brake |
| Accelerator | I |
| You       | He/She |

| We | They |
| Am/Are/Is |

| They |
| It |

| MATERIALS |

| Sign-in sheet | Skid Steer/Tractor poster |
| White board   | Skid Steer vocabulary cut outs |
| Dry-erase markers and eraser | Tape |
| Barn Illustration | Verb ‘to be’ chart |

This material was produced under grant number SH-24935-SH3 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.
**LESSON PROCEDURE**

**Welcome / Review Objectives**

*Review* Safety Content and Language Objectives with participants.  
*Ask* workers to help set a few ground rules for the lesson to create a welcoming environment for all learners.  
*Write* the ‘Ground Rules’ on the whiteboard. Suggestions include:  
  » Respect each others' responses or comments  
  » Turn off cell phones during the lesson  
  » Do not copy the answers of others. Your responses are valuable to us. Your answers will not affect your job or pay.

---

**Pre Assessment**

*Distribute* the pre-assessment worksheet to each worker.  
*Ask* workers to select one image from the corresponding rows.  
*Read* the following statements in English. Explain in Spanish if necessary.  
*Repeat* each statement several times. Give workers at least 30 seconds to respond to each item.  
  1. Circle the image(s) that shows something to protect your hearing while operating machinery.  
  2. Circle the image(s) that shows something to protect you while driving a skid steer or tractor.

---

**Warm Up / Review**

*Distribute* the Barn Illustration to participants.  
*Review* each vocabulary word listed on the Barn Illustration with participants.  
*Write* each word on the whiteboard.  
*Say* each word and ask students to listen. Provide a simple definition in English and Spanish.  
*Ask* participants to repeat back each word. Do this call-and-response-style exercise several times for each word as needed.  
*Ask* participants to identify each word in the Barn Illustration.  
*Display* the Skid Steer/Tractor poster to review machinery vocabulary.  
*Say* each word and ask students to listen. Provide a simple definition in English and Spanish.  
*Ask* participants to repeat back each word. Do this call-and-response-style exercise several times for each word as needed.
**Pronouns**

**Explain** that pronouns help us identify the person, sometimes their gender, and how many.

**Write** each pronoun on the whiteboard one at a time.

**Say** the pronoun and ask participants to repeat it with you.

**Review** the meaning of each pronoun with participants and give its Spanish equivalent (making note of its person and number, see chart below)

**Provide** examples of the pronoun using simple sentences. Incorporate the Barn Illustration and/or PPE on hand to engage workers as you give examples. Emphasize the pronoun and use real-life examples that relate to their work (see **Example 1**).

**Ask** participants questions using vocabulary from the Barn Illustration and encourage them to respond using pronouns:

- “Do **you** (individual) drive the skid steer?” (“Yes, I drive the skid steer.”)
- “Do **you** three drive the skid steer?” (“Yes, we drive the skid steer.”)
- “Does **he** speak English?” (“Yes/no, he does/does not speak English.”)

---

**Example 1**

“I have boots on today.”

“She has a blue shirt.”

“We are learning English.”

“You (all of you) work at this dairy farm.”

---

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Verb Form</th>
<th>Person</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>am</td>
<td>1st Person Sing.</td>
<td></td>
</tr>
<tr>
<td>You</td>
<td>are</td>
<td>2nd Person Sing.</td>
<td>Masculine</td>
</tr>
<tr>
<td>He</td>
<td>is</td>
<td>3rd Person Sing.</td>
<td>Feminine</td>
</tr>
<tr>
<td>She</td>
<td>is</td>
<td>3rd Person Sing.</td>
<td>Neutral</td>
</tr>
<tr>
<td>It</td>
<td>is</td>
<td>3rd Person Sing.</td>
<td></td>
</tr>
<tr>
<td>We</td>
<td>are</td>
<td>1st Person Plural</td>
<td></td>
</tr>
<tr>
<td>You</td>
<td>are</td>
<td>2nd Person Plural</td>
<td></td>
</tr>
<tr>
<td>They</td>
<td>are</td>
<td>3rd Person Plural</td>
<td></td>
</tr>
</tbody>
</table>
Discuss with participants that the verb ‘to be’ is one of the most frequently used verbs in English, just as in Spanish. Write ‘To Be’ on the whiteboard and explain that the verb ‘to be’ has many forms. It is a verb that changes according to the person or thing it describes. It is used often with other verbs and it helps us describe how we are or what we are doing.

Display the chart with the forms of ‘to be.’ Review the forms of ‘to be’ with participants. Draw attention to the subjective personal pronouns used with each form of the verb. (See the chart above; note the pronoun, person, and gender).

Ask participants to say the forms of ‘to be’ with you. Say both the pronoun and the correct form of the verb. Instruct participants to use the Barn Illustration in forming sentences with the verb ‘to be’ using the correct form. Use questions to help participants identify the correct form of the verb (see Example 2).

Ask participants to work with a partner to form short sentences with the correct form of the verb ‘to be.’ (I am, you are, he/she/it is)

Instruct participants to pay attention to number and gender. Give participants 2 - 3 minutes to form a sentence using the Barn Illustration.

Ask participants to share their examples, assisting with pronunciation as needed.

To Be - Present Tense

<table>
<thead>
<tr>
<th></th>
<th>am</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>am</td>
</tr>
<tr>
<td>You</td>
<td>are</td>
</tr>
<tr>
<td>He / She / It</td>
<td>is</td>
</tr>
<tr>
<td>We</td>
<td>are</td>
</tr>
<tr>
<td>They</td>
<td>are</td>
</tr>
</tbody>
</table>

Example 2

“What is this man doing?” He is driving the tractor.
“The cows are ready.”
“The seatbelt is buckled.”
“What color is his shirt?” It is yellow.
“Are you learning English?” I am/we are learning English.

SAFETY - Working Safely with Machinery

BACKGROUND: Equipment and machinery are a major source of injuries and cause a quarter of all deaths on farms. Farm tractors accounted for the deaths of over 1,500 people between 2003 and 2011, tractor rollovers being the single deadliest type of injury incident. Immigrant workers may have a higher risk of being injured when working with machinery for many reasons. Lack of English language proficiency and low levels of literacy inhibit workers’ ability to read and understand important safety instructions. As well, they may be more willing to take risks and less likely to report problems due to fear of losing their jobs or being deported. Common machinery found on dairy includes tractors, skid steer, forklifts, augers, mixers, milking equipment, loaders, etc.

Explain to participants that the next section will address how to work safely with machinery. Use Spanish as necessary.

Show participants images of machinery (tractor, skid steer, PTO) and ask for examples of using that piece of machinery (see Example 3).

Write the word “hazard” on the whiteboard and ask workers to provide the definition of a Hazard. (Spanish is okay). Say the definition of a hazard:

A hazard is anything in the workplace that can cause injury, illness or death.

Example 3

- Transporting heavy objects
- Using milking equipment
- Moving feed
- Using augers, grinder-mixers, shredders, mowers, generators, etc.
**SAFETY - Working Safely with Machinery**

**ACTIVITY CONTINUED FROM PREVIOUS PAGE**

Ask participants to provide examples of hazards when working with machinery. Encourage the use of English, though responses in Spanish are ok (see example box).

**Instruct** workers to identify additional hazards in the Barn Illustration when working with machinery.

**Review** machinery hazards based on workers responses and the illustration.

Examples of hazards include:

- Speed- Driving fast can endanger other workers and equipment on the farm.
- Rollover hazards- Tractors and skid steers can lose balance and roll over on uneven, muddy, or bumpy surfaces, or when overloaded or parked with the bucket up.
- Struck-by hazards- Workers can be struck by moving tractors and skid steers on the farm.
- Entanglement- Unguarded Power Take-Offs can pull loose clothing, hair, or strings and entangle workers.
- Noise hazards- loud machinery can cause hearing loss.

**ACTIVITY - Identifying Parts of the Skid Steer**

**Display** the Skid Steer/Tractor poster.

**Distribute** the Skid Steer vocabulary cut outs and a piece of tape to workers.

**Explain** that this activity will help workers label parts of the skid steer that will keep them safe while driving.

**Call out** a part of the skid steer.

- Parts of the skid steer include:
  - Bucket
  - Bucket controls
  - Brake
  - Seat belt
  - ROPS

Ask each worker to tape their vocabulary cut out to the corresponding part of the Skid Steer or Tractor on the poster. After the worker has labeled the correct part of the skid steer, ask the worker to provide an example of how this feature helps them stay safe when operating the skid steer (see Example 4).

After all parts of the skid steer are labeled and workers have provided an example of how that feature can help them to stay safe, remind workers to always be aware of objects and other workers when driving a skid steer.

**Example 4**

**Brakes** help maintain a slow, safe speed while driving.

**Brakes** help prevent collisions with objects and workers.

Ensuring the **bucket** is not overloaded will help prevent rollovers.

Knowing how to use **bucket controls** to lower the bucket will help prevent rollovers.

**Seat belts** can save workers’ lives in the event of a rollover.

**ROPS** can save workers’ lives in the event of a rollover.
Wrap Up - Review of Hazards and Safe Practices

Ask participants to identify hazards and ways to prevent injury when working with machinery. Use the Barn Illustration to help identify the hazards and then read the recommendations to prevent injuries.

Discuss how workers can prevent injuries and illness for each hazard identified.

» Speed - Drive at a safe speed and always be aware of your surroundings.
» Rollover hazards - Wear your seat belt. Know the weight recommendations for the bucket of the skid steer and do not overload the bucket.
» Struck-by hazards - Make sure windows are clean, drive slowly to avoid collisions, watch out for workers.
» Noise- Wear ear plugs to prevent hearing loss.

Post Assessment

Distribute the assessment to each worker.
Ask workers to select the image(s) that best fits each statement.
Demonstrate to workers to select one image from the corresponding rows.
Read the following statements in English. Explain in Spanish if necessary.
Repeat each statement several times. Give workers at least 30 seconds to respond to each item.

1. Circle the image(s) that shows something to protect your hearing while operating machinery.
2. Circle the image(s) that shows something to protect you while driving a skid steer or tractor.

Evaluation

Ensure each participant completes a level one evaluation.
Read each evaluation item to participants and ask them to circle ‘Yes’ or ‘No.’

¿Es importante para usted aprender inglés?
Sí  No
Hoy aprendí algo que puede ayudarme a mantenerme seguro en el trabajo.
Sí  No
Las actividades y la materia fueron útiles y relevantes para mi trabajo.
Sí  No
El instructor estaba familiarizado con el material del entrenamiento.
Sí  No
El instructor fue entusiasta.
Sí  No