

AgriSafe Hazard Mapping in the Ag Classroom

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Objectives

- To examine the hazards in agricultural production.
- To identify and locate hazards for targeted elimination.
- To embrace a participatory process that involves as many students as possible.
- To respect the vast array of skill, experience, and know-how that students have about their farm jobs and their dangers.
- To collectively and creatively pool our knowledge and prioritize what problems to eliminate.

What is the Hazard Mapping Method?

A Hazard Map is a **visual representation** of the workplace

Draws on what students take away from their **farming experience**

Works best when conducted among a **small group of students** with some similarity in their work and exposures



Hazard Mapping Process

- Used to identify risks within an entire farm and to specify hazards associated with...
 - Areas
 - Buildings
 - Job Classifications
 - Processes
- The farm-wide map can be used to show what major hazards exist throughout the farm



Specific Hazard Maps



- There are a variety of risks on the farm that create opportunities for mapping.
- Specific hazard maps might include:
 - Farm sheds
 - Confinement operations
 - Feeding operations
 - Machinery and small equipment
 - Manure pits
 - Grain silos
 - Chemical storage areas

Selection of Hazard Map

In order to facilitate the learning process and ensure that students a variety of facilities, please consider

1. Count off numbers from 1-8 to form groups. Students will choose from the list above and conduct exercises.
2. Pull names from a “hat” with the area-specific map names; i.e. Farm Sheds, Confinement, etc.

Please note: each team should have no more than 8 members to ensure maximum participation

Participatory Learning Method

Based on a series of problem-solving activities.

Each hazard mapping activity has a common basic structure:

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graph TD; A[Each hazard mapping activity has a common basic structure:] --- B[Small Group Tasks]; A --- C[Report-Back]; A --- D[Summary];
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Small Group Tasks

Report-Back

Summary

Small Group Tasks

The training always begins with groups working together at their tables in groups of 4-5 students (maximum of 8).

Each hazard mapping activity has a task, or set of tasks, for the groups to work on.



Report-Back

For each hazard activity, there is a...

Drawer



- Person to sketch hazard map on graph paper

Scribe



- Person to take notes on group discussion and reports back to the class as a whole

Trainer



- Records each scribe's report-back on large pads of paper in front of the class so everyone can see

Summary

- Before the discussion drifts too far, the trainer needs to tie it all up during the summary.
- The trainer highlights the key points of the hazard activity and brings up any problems or points that may have been overlooked during the report-back.



An aerial photograph of a winding asphalt road through a lush green field. The road curves from the top center towards the bottom right. The background is a soft-focus landscape with green grass and some distant structures.

Hazard Map Learning Priorities

- The AgriSafe Hazard Mapping activity is based on the idea that every training is a place where **learning is shared**.
- Retention of information is enhanced when students are active participants.
- Learning is **not a one way street** that runs from trainer to worker.

Three Learning Exchanges

Student-to-Student

- Most of us learn best from each other.

Student-to-Trainer

- Trainers also have a lot to learn!

Trainer-to-Student

- Opportunity to clear up any confusion and emphasize key points.

Student Activity #1

As a classroom, list the hazards commonly associated with the type of farming operation in which you work.

Be prepared to explain how each item constitutes a hazard at your farm.

Expected Outcome:
Participants will be able to identify potential hazards and ways to reduce harmful risks while performing duties in agricultural environments.



Student Activity #2

In your groups, choose a scribe and review the AgriSafe factsheets.

Based on your own experience and the factsheets, use the sheet of paper/markers and follow steps 1-3 below to help create one Hazard Map for your group. Use the factsheets to help you label and describe the specific hazard areas.

1. Make a drawing on the sheet of paper that shows the basic layout of your farm or specific area your group has been assigned.
2. Identify the hazards in each area using a color-coded circle on the map.
3. Based on your map, make a list of the hazards that concern you the most and be ready to tell us why these hazards are a concern for your group.

Expected Outcome: In smaller group settings, participants will be able to actively learn through various roles such as the scribe, the reporter, and those that provide examples and feedback on activities.



Student Activity #3

In your groups, choose a scribe. Answer the following questions and be prepared to report your answers to the group.

1. What were the positive aspects of working in a group while creating this map?
2. What would be the advantages of using Hazard Maps at your farm workplace?

Expected Outcome: This summary exercise will encourage more participation from students in a smaller setting. These conversations will help each individual consider environments in which they are exposed to potential hazards.



Step-by-Step Hazard Identification

Steps	Pg	Who is Responsible	Time	Materials
Pre-Test		Trainer	5	SurveyMonkey link
Review the objectives of hazard mapping	1	Trainer	3	Projector or board
Explain the difference between a hazard and risk		Trainer	3	Projector or board
Review OSHA Whistle Blower policy and Worker Rights		Trainer	3	Share via projector https://www.osha.gov/OshDoc/data_General_Facts/whistle_blower_rights.pdf https://www.osha.gov/Publications/osh3165.pdf
Create Groups of 4-8 students	2	Trainer	3	-
Assign farm specific area or farm wide mapping to groups	2	Group or Trainer	3	Pictures of farm structures.
Assign a Scribe	3	Trainer	3	-
Distribute 1-2 factsheets to each group and allow group to read factsheets	3	Trainer	10	See AgriSafe resources.
Discuss lessons learned from fact sheet as a classroom	5	Class	10	Projector or board
Activity 1 : Discuss General Hazards	6	Class	10	Factsheets
Activity 2 : Create a Hazard Map(s)	6	Groups	20	Sticker sheet with icons, large graph paper, markers
Activity 3 : Reflection of Mapping Process	6	Groups	10	Large sheets for recording
Post-Test		Trainer	5	SurveyMonkey link



AgriSafe Key for Hazards Icons

	Low Hazard	Med Hazard	High Hazard
Livestock			
Chemical			
Respiratory			
Ergonomic			
Hearing			
Electrical			
General Hazard			

Questions?

Thanks!