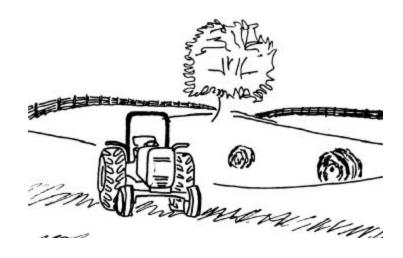
## Jim In A Jam



# **Purpose**

This simulation exercise is a story about a teenager who works on a farm. The exercise is based on discussions with parents and their children across Kentucky, Iowa, and Mississippi. The exercise also includes information from University of Kentucky researchers about economics, productivity, health, and injury. The purpose of the exercise is to tell the story of Jim in a way that lets you experience some of the decisions the characters face as they experience and then cope with a serious farm injury. We hope the exercise is meaningful for you and will help you develop safe farm-work practices.

#### Credits

This simulation exercise was initially developed in 1999 by Pamela Kidd, Deborah Reed, Henry Cole, Daniel Rosnik and Tim Struttmann at the Southeast Center for Agricultural Health and Injury Prevention, the Kentucky Injury Prevention and Research Center, and the University of Kentucky College of Nursing under the United States Department of Health & Human Services/United States Public Health Service/Centers for Disease Control & Prevention/ National Institute for Occupational Safety and Health (NIOSH) Grant #1 RO1 CCR414307 to the Southeast Center for Agricultural Health and Injury Prevention, Deborah Reed, Principal Investigator. The views and conclusions contained in the document are those of the authors and do not necessarily represent the official policies or recommendations of NIOSH, the University of Kentucky or any department or agency of the government of the United States or the Commonwealth of Kentucky.

## Instructions

You should have three items to complete this simulation: A problem book, an answer sheet, and a pencil. Read the background information and problem situation described on the following pages. Next, answer each of the questions one at a time. Do not mark your answers in the problem book. When you have selected an answer to a question, look up its number on the answer sheet, and circle T if the answer is true or F if it is false. Some questions may have more than one true answer. Don't jump ahead. As you work the exercise look at the background information about "Jim in a Jam" (page 3) as often as you need to. It's okay to look back to earlier questions and answers, but please don't change your answers.

When you have finished, you will learn how to score your answers. You will also receive a master answer sheet that will explain why each answer is true or false.

## **Background Information**

### Jim

Jim is 15 years old. He is state champion in the 108-115 pound weight class division of the wrestling team. He grew up in Central City and is a FFA member at Central City High.

Although he's never lived on a farm, for the last three summers he has worked on a farm. Jim likes working on the farm because he loves the outdoors, and the money he earns will help him pay for college. He plans to be a veterinarian.

#### Jill and Her Dad

Jill Ogden is Jim's vo-ag classmate, and she lives on a 450-acre hay, grain, and cattle farm. Jill lives with her mom, dad, and 10-year old sister. Jill works with her dad on the farm but they occasionally need an extra hand at harvest times. Usually Mr. Ogden hires teenagers Jill knows from school.

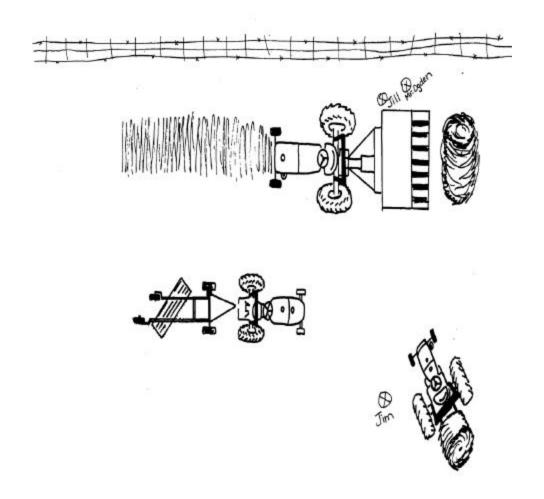
It's fall haying season. The Ogdens have 20 acres of hay cut and on the ground. Mr. Ogden asked Jill if she could find someone to help with the haying tomorrow (Saturday) because the weather forecast is calling for rain by Saturday evening. Jill calls Jim to see if he can help. He agrees.

#### **Problem**

It is Saturday morning. Jim shows up for work dressed in sneakers, baggy jeans, and an oversized T-shirt. Mr. Ogden assigns the tasks. Jill will rake the hay, Mr. Ogden will run the baler, and Jim will transport the round bales to a storage shed a quarter-mile away. The work is proceeding smoothly, but more slowly than expected. Lunchtime comes and goes without a break. The sky darkens.

Please turn the page and continue.

Jim returns to the field from the storage shed to get another round bale. Jill and her dad are stopped in the middle of the field by the fence and are off their tractors. They are bending over the right side of the baler pointing at something in the baler. The tractor is idling, and the baler is running slowly. Jim pulls up on the left-hand side of Mr. Ogden's tractor. He decides to go see what's wrong. He puts his tractor in neutral, sets the brake, and gets off. The baler PTO shaft and Mr. Ogden's tractor are between him and Jill and her dad.



# **Question A**

How should Jim approach Jill and her dad?
1. Walk around the tractor and the baler and get a closer look.
2. Carefully step over the slowly rotating PTO shaft.
3. Lean over the PTO shaft and pull the PTO lever on the tractor to stop the baler.

To save time, Jim decides to carefully step over the PTO shaft. He sees the shaft is turning slowly (2-3 rotations per second). He also notices that part of the PTO shield on the shaft is missing. But he decides to step over the shaft anyway.

## **Question B**

What could happen to Jim as he steps over the rotating PTO shaft?

- 4. His shirt could get caught in the shaft.
- 5. He could step over the shaft without a problem.
- 6. His pants could get caught in the rotating shaft.
- 7. He could trip and fall into the PTO shaft.

As Jim steps over the shaft, his T-shirt gets caught on a piece of metal sticking out from the PTO shaft where the guard is damaged. Jim feels a tug and panics as he realizes his shirt is winding around his arm and pulling him toward the rotating PTO shaft.



# **Question C**

What can Jim do now?

- 8. Yell for help.
- 9. Jerk free.
- 10. Take off his shirt.
- 11. Turn off the PTO.

In an instant, Jim's shirt is yanked off his shoulders. In less than a second, his arm and shirt become caught in the rotating PTO shaft and, as if in a bad dream, he feels the crunching of bones as his arm wraps around the shaft. In the five seconds it takes Jill's dad to run to the tractor and shut off the PTO, Jim is flipped around and around 15 times. Jill runs to the house to call the rescue squad. The rescue squad arrives, frees Jim, and then rushes him to the hospital. The surgeon operates and tries to save Jim's arm. After intensive therapy for two weeks in the hospital, Jim's arm is amputated just above the elbow. Jim realizes that his life is changed forever. His injury will also affect the lives of others who know him.

### Question D

What effects could Jim's injury have on him and his family?

- 12. Jim's family may have financial problems because of the cost of Jim's treatment and rehabilitation.
- 13. Jim will not be able to become a veterinarian.
- 14. Jill's dad may face criminal charges because Jim was injured while working on the Ogden farm.
- 15. Jim will be thought of as "different."
- 16. Jim will have to retrain to be a competitive wrestler.

# End of the story

Please mark your answers on the answer sheet and complete the questionnaire that is attached to the answer sheet. Ask the instructor for a copy of the answer key. Discuss any ideas and differences of opinion. Give your completed answer sheet and questionnaire to the instructor. Thanks! Your answers may be used to improve this exercise.