

5. SIMS - Simulation Exercises

This section of the notebook contains eight simulation exercises. Seven are in paper and pencil format and the last one in a CD-ROM multimedia format. All eight simulations require the user to interact with a developing story, its characters, plots, and predicaments. The user must make choices among alternative decisions and note the consequences of these choices. The simulations are most effective when used in small groups of from two to four individuals who collaborate during the activity. The exercises also work well when larger groups of people are divided into small groups.

Each of the seven paper-and-pencil simulations consists of four parts. These are the Tips, the Problem Booklet, the Answer Sheet, and the Answer Key. The Tips are for the teacher or group leader. They tell how to administer the simulation exercise. The Problem Booklet presents the simulation scenario a page at a time using text and graphics. The participants mark their choices on an Answer Sheet. When each small group has finished, participants compare their answers to the Answer Key and discuss any differences of opinion. The paper and pencil simulations can be completed in 20 to 30 minutes.

The “Kayles’ Difficult Decisions” CD-ROM simulation exercise is self-contained and requires no paper materials. It includes many graphics, text and audio. It is designed for PC computer administration and works best when people work in pairs at a computer. It requires from 60 to 90 minutes to complete this interactive computer simulation. A wealth of information is included in follow-up notes that can be accessed by topic while working through the program. Paper and pencil versions of the Kayles’ simulation are available upon request.

All the simulations are based on events and predicaments encountered by real farmers and farm family members as they dealt with some problem or issue. Farmers and farm family members involved in field-testing the simulations report that they are interesting, engaging, and memorable. The materials are ideal for use as hands-on activities in classrooms and community meeting settings.

Most of the simulations deal with tractor overturn risks, injuries, and their prevention through the use of ROPS and seat belts. Two of the simulations deal with child second riders on tractors and the risks involved in this practice. Another simulation deals with the hazards children can encounter when they play on a farm. The last exercise deals with the risk of severe head injury when horseback riding without a helmet and the protection provided by a certified riding helmet.

SIMS - Simulations (continued)

Simulation Exercise Name	Abbreviation	Comment
No Way to Meet a Neighbor	NWX (X stands for “exercise”)	A story about a fatal highway collision between a city dweller and an experienced farmer during haying season in good weather and broad daylight on a Friday afternoon. Defensive driving in farming country and safe equipment operation are emphasized.
A Foggy Morning Meeting	FMM	An early morning collision between an automobile and a round hay baler occurs on a hilly and foggy country road. The woman driving the automobile is severely injured and her three children are shaken up. Defensive driving and safe equipment operation are emphasized.
Tommy’s Troubles	TTX	An inexperienced 14-year-old boy is clearing a pasture of weeds and brush with a tractor and rotary mower. The tractor runs onto a log and starts to overturn. Decision alternatives include what the boy can do to escape injury. What he and his family could have done to prevent an overturn injury is examined.
Tyler’s Ride and Tantrum	TRT	Over the objections of his mother, a 4-year-old boy rides on a tractor with his grandfather. The boy has a tantrum when his mother insists he get off the tractor. Later, on a nearby farm, another child is run over and killed when he falls off a tractor another grandfather is driving.
Tony’s Ride	TRX	A true story about an 8-year-old boy who died when he fell off a tractor and under a mower when he was riding with his father. The simulation explores the reasons parents allow children to ride on tractors, the misconceptions involved, the severe consequences that can result, and ways to avoid this dangerous practice. Summaries of similar cases are provided.

Simulation Exercise Name	Abbreviation	Comment
Vicki's Visit	VVX	Vicki, a young girl from a suburb visits her cousins who live on a farm in the country. The 6-year-old child sees the farm as an awesome playground. Soon she wanders away and is exposed to several hazards. Her two young cousins also encounter hazards and risk injuries as they search for Vicki. Summaries of child farm injuries and close calls are provided.
Heather on Horseback	HOH	A 13-year-old girl who is learning to ride a horse is upset that her dad is leaving for a business trip. She begins riding her horse fast, without a helmet or supervision. She is thrown and suffers a severe head injury and a permanent disabling injury. Summaries of many similar cases are included along with a website address that regularly publishes these cases.
Tractors, Farm Safety and Economics	TFSE CD	There are two interactive multimedia exercises on this CD. The first follows a farm family through a three-year period as they expand their farm operation and struggle to deal with labor and money shortages. While stressed by lack of time and bad weather, their 14-year-old son is severely injured in a tractor overturn. The simulation illustrates the economic advantages of good farm planning and management, investing in safety equipment, and using safe work practices. The second exercise is a demonstration of fatal and non-fatal farm tractor overturns and the injury prevention effectiveness of ROPS and seat belts. Both exercises can be used in high schools and young and adult farmer classes. A multimedia PC computer is required.