Answer Feedback Book for the Kayles' Difficult Decisions





Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health







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The Kayles' Difficult Decisions tells the story of a fictional farm family. Resemblance to any actual person or farm is purely coincidental.

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DHHS (NIOSH) Publication Number 2009–XXX

June 2009

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The Kayles' Difficult Decisions

Answer Feedback Book



The Kayles' Difficult Decisions exercise should be completed by small groups of three or four persons working together. Each person in each small group should have a copy of the Kayles' *Problem Book*, and should also have their own copy of the answer sheet.

How to Use this Answer Feedback Book

Before you begin working through the Kayles' story presented in the *Problem Book*, you should select one person in your small group to keep the *Answer Feedback Book*. That person should keep the *Answer Feedback Book* closed until it is time to look up answers for particular issues presented in the *Problem Book*. After every member of the group has marked his or her answers for an issue, the person with the *Answer Feedback Book* should open this document to the page that has the answers for that issue. Then the group members should compare their answers with the answers listed in the *Answer Feedback Book*.

This process should be repeated until the group members have read through the entire *Problem Book*, marked their answers for each issue on their individual answer sheets, and then discussed and compared their answers with those listed in the *Answer Feedback Book*.

You may always return to previous questions and answers, but **please do not look ahead**. Please do not write in this book—Save it for use by other groups. Thanks!

When your group has responded to all eight questions in Issue A, please turn the page for the answer feedback for Issue A.

Issue A

Disagree

Disagree

Disagree **<u>u</u>**

Agree 🗹

Agree 🗹

Agree \Box

Issue A—Considering the Purchase

If the Kayles buy the farm, what are some things that might happen?

- Their net farm income might increase.
 Correct! Their farm has been profitable. The additional land might increase volume and total profit.
- 2. They might have too little cash to maintain and replace structures and equipment. Agree Disagree Correct! Increased debt decreases borrowing capacity and may increase mortgage payments.
- 3. They might have to take a second mortgage on their first farm.

 Correct! They will need a \$36,000 (30%) down payment and perhaps \$10,000 to \$15,000 for maintenance and repairs on the second farm. This does not include money to expand the herd or to upgrade equipment.
- 4. Eugene might have to take an off-farm job to earn extra money.

 He is already too busy. His expanded farm will require all of his time for labor and management.



If the Kayles buy the farm, what are some things that might happen?

Issue A

(continued)

5. They might acquire enough land to bring Billy into farming when he is an adult. Disagree **Correct!** The additional land might support two families. The original farm cannot. Agree 🗹 Disagree \square 6. Net farm income might decrease. Correct! Product prices might fall. Productivity might decrease because of the extra acreage and labor needs. 7. Profitability and cash flow will double or nearly double. Agree \square Doubling the farm size does not guarantee that profitability will double or even increase. Increased debt load and operation costs may restrict cash flow. Agree 🗹 8. They might not have enough hours in the day to get the work done. Disagree



If the Kayles buy the farm, what are some things that might happen?

When you are finished discussing the items in Issue A, please return to the *Problem book* and begin Issue B. You may always return to previous questions and answers, but **please do not look ahead**.

Correct! Like land and money, labor is a resource that is often in short supply.

Taking on the Dillon farm will make much more work for the Kayles.

Issue B

Disagree

Disagree

Disagree

Agree \square

Agree \Box

Issue B—Finding Extra Help

What are some things the Kayles should do to deal with the larger farm they may soon own?

- 9. Ellen should quit her teaching job and work full-time on the farm.

 If Ellen quits her job, the Kayles will lose their health insurance benefits and a dependable source of income. Serious cash flow problems may result.
- 10. The Kayles should hire a full-time farm worker.

 Finding, training, paying, and keeping a competent and dependable worker is difficult. They may have too little cash to pay wages and benefits.
- 11. They should hire more part-time labor during peak times. Correct! Good idea, but most farmers have trouble finding enough capable and dependable part-time workers. This option is less expensive than hiring a full-time worker.



What are some things the Kayles should do to deal with the larger farm they may soon own?

he is better off doing this work himself if he can.

Issue B

(continued)

12.	Eugene should hire someone for spraying, planting, and harvesting jobs.	Agree 🗆	Disagree 🗹
	Because Ben's farm is similar to Eugene's and Eugene owns the right equipment,		

13. Eugene should ask his brother, George, to quit his city job and become a full-time Agree Disagree partner in the farming operation.

There is enough acreage to support two, but not three families. Bringing George in as a full-time partner would prevent Billy and his future family from being brought into the operation.



What are some things the Kayles should do to deal with the larger farm they may soon own?

When you are finished discussing the items in Issue B, please return to the *Problem book* and begin Issue C. You may always return to previous questions and answers, but **please do not look ahead**.

Issue C

Disagree

Disagree

Disagree

Agree 🗹

Agree **Y**

Agree 🗹

Issue C—Options for Managing an Expanded Farm

What are some good options for managing an expanded farm?

14. The Kayles should keep their good heifers to raise as brood cows.

Correct! This will minimize their investment in breeding stock, but will hart of

Correct! This will minimize their investment in breeding stock, but will hurt cash flow because they won't have heifers to sell. It will take 3 years to see cash from this decision.

15. They should purchase an additional 10 to 25 brood cows.

Correct! This may increase production and cash flow, but it may require borrowing. At \$700 each, 25 cows cost \$17,500. Adding 25 more cows will increase labor (pregnancy checks, calving, vaccinations, etc.).

16. Eugene should lease some of the new pasture land to another farmer for grazing at the going rate of \$35 an acre per season.

Correct! Even if they retain heifers and get more brood cows, they won't need all the pasture until the herd expands.



What are some good options for managing an expanded farm?

Issue C

(continued)

17.	The family should add a new crop—an alternative enterprise such as bell peppers,	Agree 🗆	Disagree 🗹
	sweet corn, staked tomatoes, etc.		
	Risky! This option will require the Kayles to learn and manage a new enterprise.		
	They will have to find a market. New equipment and facilities may be required.		
	For example, a sweet corn hydro-cooler costs about \$40,000.		
18	They should buy a newer and larger tractor equipped with a roll bar (ROPS).	Agree 🗹	Disagree 🗆
10.	Correct! A larger tractor is needed. Increased production from the Dillon farm will	8-00	2.55



What are some good options for managing an expanded farm?

When you are finished discussing the items in Issue C, please return to the *Problem book* and begin Issue D. You may always return to previous questions and answers, but **please do not look ahead**.

increase wear and tear and perhaps equipment break downs. The ROPS can also

prevent a costly injury to the Kayles, who will be working longer days.

extremely strenuous.

Issue D—Hazards During Harvest

What hazards are present as Eugene, Ellen, and Billy harvest the corn silage?

19.	Billy's tractor is too small for the job. Correct! Even with good brakes and tires, a 35-horsepower tractor is too small (underpowered and underweight) to move loaded silage wagons up and down hills. (See Figure 5.)	Agree	₫	Disagree □
20.	The noise from the tractors is excessive. Correct! Ellen and Billy are exposed to the noise from two tractors and the blower when they are unloading. Eugene is exposed to noise from his tractor and chopper. All three should wear hearing protection. (See Figure 5.)	Agree	ď	Disagree □
21.	Someone could become entangled in the PTO (power take-off). Correct! Ellen is at risk because operating the self-unloading wagons and the blower puts her between two rotating PTO shafts. She may have to cross a shaft. Proper and well-maintained shields reduce the risk. (See Figure 5.)	Agree	₫	Disagree □
22.	All three are at risk of heat stroke. Unlikely! It is late in the afternoon, overcast, and windy. The work being done is not	Agree		Disagree 2



What hazards are present as Eugene, Ellen, and Billy harvest the corn silage?

Issue D

(continued)

Disagree \square

23.	Someone might be caught or crushed between the two tractors at the silo.
	Correct! The silage wagons pull in close to the blower and tractor that operates the
	blower. It is noisy and easy to be distracted and pinned. (See Figure 5.)

Agree ☑ Disagree □

Agree 🗹

- 24. Steep slopes, sink holes, and ravines might contribute to tractor overturns.

 Correct! Billy has to cross steep slopes and drive in the corn field. Eugene has to operate the chopper in tall corn that can hide a hole. (See Figure 5.).
- Agree □ Disagree

25. Breathing silo gas may cause illness or death.
Silo gas develops only after fermentation. The silage is fresh.

- Agree

 ✓ Disagree □
- 26. Taking short cuts, being in a hurry, and being tired greatly increase the risk of an injury.

Correct! If the chopper clogs, Eugene may be tempted to clear it without shutting down. Billy may be tempted to drive too fast. All three are at greater risk as they hurry and become fatigued.



What hazards are present as Eugene, Ellen, and Billy harvest the corn silage?

When you are finished discussing the items in Issue D, please return to the *Problem book* and begin Issue E. You may always return to previous questions and answers, but **please do not look ahead**.

Issue E

Disagree

Disagree

Disagree

Issue E—First Aid for Billy

What should Eugene do now?

27. Eugene should help Billy sit up, ask him whether he can move his legs, and tell him he is going to be OK.

Moving him or asking him to move could make his injuries worse. He could bleed to death or be permanently paralyzed.

28. Eugene should tell Billy to lie still and not to move; he should assure him that he is going for help and will be right back.

Correct! Billy should not be moved until trained first responders or emergency medical service (EMS) personnel arrive. Billy's best chance is for Eugene to call 911 as soon as possible.

29. Eugene should put his belt around Billy's right leg just above the open wound. He should then tighten the belt like a tourniquet until the bleeding stops. This wastes precious time and will probably cause even more injury to Billy. He could lose his leg.



Agree \Box

Agree **Y**



What should Eugene do now?

Issue E (continued)

30.	Eugene should carefully straighten Billy's leg into a more comfortable position and then go for help. Eugene should not straighten Billy's leg. Even slight movement could cause permanent damage.	Agree	Disagree 🗹
31.	Eugene should give Billy a drink of water and then go for help. Eugene should not give water (or other liquids) to Billy. He may vomit and choke.	Agree	Disagree 🗹



What should Eugene do now?

When you are finished discussing the items in Issue E, please return to the *Problem book* and begin Issue F. You may always return to previous questions and answers, but **please do not look ahead**.

Issue F

Disagree

Disagree

Disagree

Agree 🗹

Agree \Box

Agree \Box

Issue F—Calling for Help What should Billy's parents do now?

32. Eugene should take the pickup truck (which has a portable cellular phone and a blanket in it) and get back to Billy.

Correct! Billy needs help. The telephone may be a lifesaver.

- 33. Eugene should drive the pickup while Ellen calls 911 on the cellular phone. It is better if Ellen drives and Eugene calls. He saw what happened, knows Billy's exact location, and can describe Billy's condition for the EMS dispatcher.
- 34. Eugene and Ellen should hurry back to Billy, wrap him in a blanket, lift him gently into the back of the pickup truck, and then drive him slowly and carefully toward the community hospital to meet the ambulance.

They should *not* move Billy, and they should certainly not place him in the back of the truck and drive him to the hospital. This handling and rough ride would make Billy's injuries worse and might kill him.



What should Billy's parents do now?

Issue F (continued)

35. The parent who stays with Billy should keep the phone, watch over him, comfort him, and keep him warm and quiet. The other parent should take the pickup truck and go to the turnoff to the farm at the main road to wait for the ambulance and lead it back to Billy.

Agree **☑** Disagree □

Correct! The long gravel road to the farm is easy to miss. One parent should go to the turnoff, pull the truck out so it can be seen, and turn on the flashers. The other parent should stay with Billy and keep the phone in case he gets worse or the dispatcher needs to contact the Kayles.



What should Billy's parents do now?

When you are finished discussing the items in Issue F, please return to the *Problem book* and begin Issue G. You may always return to previous questions and answers, but **please do not look ahead**.

Issue G—Covering Unexpected Expenses

How can Eugene and Ellen cover these expenses?

Otherwise, the hospital may turn the bill over to a collection agency.

36.	Eugene and Ellen should use their farm line of credit. Correct! This option may be best in the short run. However, it will reduce available funds to run the farm.	Agree ⊻	Disagree C
37.	They should max out their credit cards. The Kayles will pay very high interest rates if they choose this option. This may hurt their credit rating and slow repayment of debt.	Agree 🗆	Disagree 1
38.	They should pay some of the bills and let some of the bills go. If the Kayles can't pay the hospital bill, they should negotiate a payment plan.	Agree 🗆	Disagree 9

estra on credit end: \$1500 °C.

substitute labor: \$1000 °C.

tobacco-quality loss: \$1300 °C.

Ellino moome loss: \$1400 °C.

\$5200 °C.

How can Eugene and Ellen cover these expenses?

Issue G

(continued)

39. The Kayles should talk to their lender and discuss cash needs and repayment. Correct! As soon as possible, they should discuss their cash needs and repayment ability with their lender.

Agree ☑ Disagree □

estra on creat card: \$1500 °C.

substitute later: \$1000 °C.

Tobacco-quality/ose: \$1300 °C.

Ellin moorne loss: \$1400 °C.

\$5200 °C.

How can Eugene and Ellen cover these expenses?

When you are finished discussing the items in Issue G, please return to the *Problem book* and begin Issue H. You may always return to previous questions and answers, but **please do not look ahead**.

Disagree

Disagree

Disagree

Agree \Box

Agree \square

Agree

Agree **Y**

Issue H—Options for Managing the Farm After Billy's Recovery What choices should the Kayles make?

40. Eugene and Ellen should accept Billy's offer to drop out of school when he turns 16 in March so he can work full time on the farm.

Although this might give Billy more time to work on the farm, his parents say, "No! It's best for you to stay in school and get your diploma."

41. The Kayles should sell the Ben Dillon place.

The Kayles need greater gross income to meet the debt. Unless land prices have increased substantially, it is best to keep the Dillon farm. They need enough profit to pay off the land and their improvements.

42. They should share-lease the 9,000-lb. tobacco base on the Dillon farm. Possibly a correct option! A 50-50 share-lease on the 9,000-lb base could generate \$8,000. This money could be used to pay down debt. If the terms of the share-lease are generous for the Kayles, this may be a viable option for 1 year.

43. The Kayles should lease out the 40 acres of cropland and 80 acres of pasture on the Dillon place.

Correct! This could bring in \$50 an acre or \$2,000 for the cropland, and \$35 an acre or \$2,800 for pasture. This \$4,800 could help pay down debt.



What choices should the Kayles make?

Issue H

(continued)

Disagree

Disagree

Agree \Box

Agree 🗹

Agree 🗹

4.4	CIDII			48.4	(20)	0.71		
44.	Thev	should	sell a	third	(30)	of the	brood	cows.

This option is a last resort. Selling a productive asset is a short-run fix, but it hurts long-term profitability. At \$720 each, the 30 cows would bring in \$21,600. If the Kayles do sell the extra brood cows, the funds should be used to pay down debt.

45. Ellen should encourage Eugene to get an off-farm job.

Possibly a correct option! Eugene already works full time on the farm and needs to continue to do so. If the Kayles were to decide to share-lease the tobacco for 1 year, it might be possible for Eugene to make up for some of the lost revenue on the tobacco by taking a part-time job for one season. However, this is only a temporary measure. In general, an off-farm job will result in longer work hours, greater fatigue, less maintenance, taking short cuts, and carelessness. He may flip a tractor or suffer another injury.

46. The family should restructure the debt.

Correct! The Kayles' problem is short-term debt—not long-term debt. They should refinance short-term debt (credit cards and hospital bills) and pay them off over a longer period. This step will improve cash flow and maintain their investment in the farm.



What choices should the Kayles make?

When you are finished discussing the items in Issue H, please return to the *Problem book* and begin Issue I. You may always return to previous questions and answers, but **please do not look ahead**.

Disagree

Disagree

Disagree **T**

Disagree 🗹

Agree 🗹

Agree 🗹

Agree \Box

Agree \Box

Issue I—How a Tractor With a Roll Bar (ROPS*) Might Have Changed Things What difference could a tractor with a ROPS have made?

(Please check whether you AGREE or DISAGREE with each statement.)

47. Billy probably would not have been injured.

Correct! The larger and newer tractor would have been used to chop the silage. Billy would have hauled the wagons with the Kayles' 1985, 75-horsepower ROPS tractor. The heavier, well-maintained, 75-horsepower tractor probably would not have rolled. Even if it had rolled over, its ROPS and a fastened seat belt would have prevented Billy's injuries.

48. The Kayles would have saved money.

Correct! The Kayles could probably have purchased a larger, used, ROPS-fitted tractor in good condition for \$12,000 to \$15,000. The 20% of the total that the Kayles owe for Billy's initial hospital care and doctor bills is \$22,400. Other initial expenses related to the injury add \$5,200 more for a total of \$27,600.

49. Buying a larger tractor was not an option because they could not afford it at that time.

When the Kayles were buying brood cows and leasing land, they could have planned to buy a newer and larger ROPS-equipped tractor. One livestock and equipment loan could have raised the money needed for a good used tractor.

50. Even without the larger tractor, they could have prevented the injury if they had maintained the brakes on the utility tractor.

Maintaining the brakes on the 35-horsepower tractor would have made it safer, but it might not have prevented the injury event. The tractor is too small and under-powered to pull an 8-ton, loaded forage wagon up and down hills.



What difference could a tractor with a ROPS have made?

^{*}A ROPS is a rollover protective structure, or roll bar.

Issue I

(continued)

Disagree

51.	The Kayles could have been less stressed and worried about equipment breakdowns.
	Correct! Using old equipment that is in poor repair and that is too small for the job
	places great stress on farmers and those who operate the equipment. Breakdowns
	usually happen at peak harvest times, causing delays, fatigue, and worry.

Disagree

52. The risk of injury would have been decreased for everyone who operates the tractors. **Correct!** Had the Kayles purchased a larger tractor with a ROPS, they would have had much better protection from rollover injury because (a) they would have had two tractors with ROPS, and (b) they would have had larger tractors more suited to their ongoing farming tasks and increased production.

Agree 🗹

53. Family members and others who operate the tractors would have had greater peace of mind.

Disagree

Correct! Having a larger farm means that Eugene, Ellen, and Billy will all be working longer hours and will often be fatigued. More part-time help will be needed for tractor driving. The farm is hilly with many sinkholes. The two ROPS tractors and fastened seat belts protect all tractor drivers from rollover injuries.

54. The Kayles would have been in compliance with the law.



Disagree

Possibly Correct—depending on the State in which the farm is located. Farms that employ 10 or fewer workers are exempt from enforcement by the Federal Occupational Safety and Health Administration (OSHA). However some State OSHA offices do enforce the *Federal* OSHA rules on small family farms—but as *State* regulations. Nevertheless, creating a safe environment and maintaining safe work practices is up to the farmer.



What difference could a tractor with a ROPS have made?

> When you are finished discussing the items in Issue I, please return to the *Problem book* and begin Issue J. You may always return to previous questions and answers, but please do not look ahead.

Disagree

Agree \Box

Issue J—Managing Workloads Better

What might the Kayles have done to manage the increased workload more effectively?

55. They could have used the large 75-horsepower tractor for both chopping the corn Agree 🗹 Disagree and hauling the loaded silage wagons to the barn. **Correct!** Eugene could have used the 75-horsepower tractor to haul the chopper and full forage wagons to the barn to be unloaded. This would have slowed him down, but it would have been a safer way to do the job. (The Kayles also might have borrowed a larger tractor from a neighbor for Billy to use to haul the loaded forage wagons.) 56. They could have better anticipated and planned for workload deficits, just as Agree 🗹 Disagree they planned and managed cash-flow deficits. **Correct!** The addition of the Dillon farm resulted in a large labor increase for the Kayles (animal care, larger crops, more maintenance). Like money, land, or equipment, labor is a limited resource that should be planned and managed carefully.



What might the Kayles have done to manage the increased workload more effectively?

57. In retrospect, perhaps the Kayles should not have purchased the Dillon farm. The Dillon farm was adjacent, a good buy, and an opportunity for Billy to become a full-time farmer when he grew up. However, the purchase increased the workload, fatigue, emotional and financial stress, and risk of injury. The Kayles may not have fully anticipated and planned for the increased work and stress.

Issue J

(continued)

58. The Kayles should have seriously considered upgrading their farm machinery and implements when they purchased the farm.



Correct! The Kayles needed a larger tractor in good condition for their increased production. Some new farm implements might also be needed for the tractor. These equipment needs could have been planned as part of the overall farm expansion. Good used tractors and implements are often available at reasonable prices.



What might the Kayles have done to manage the increased workload more effectively?

When you are finished discussing the items in Issue J, please return to the *Problem book* and begin Issue K. You may always return to previous questions and answers, but **please do not look ahead**.

Issue K

Issue K—Something to Think About on the Way Home

Think about the Kayles' story. Then think about your farm and family. If you don't live or work on a farm, think about someone who does.

No risk	0	1	2	3	4	5	6	7	8	9	10	High ris
Please expl	lain											
Has this av	varoisa o	onvince	A vou to r	noka sofa	ty a high	ar priorit	y on you	r form (o	r the for	n vou ore	thinkin	a about) and t
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	otect far	nily men	nbers from	n injury?	(Circle o	one numb	per.)	·				,



Think about the farm where you live or work or think about someone you know who lives or works on a farm.

61. Suppose that someone was seriously injured or killed on your farm (or the farm you are thinking about). What impact would this have on the farm and the farm family? (Circle one number.)

 No impact
 0
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 Huge impact

 Please explain.



Think about the farm where you live or work or think about someone you know who lives or works on a farm.

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DHHS (NIOSH) Publication Number 2009–XXX

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