

A Qualitative Assessment of Farmer Responses to the Certified Safe Farm Concept in Iowa and Nebraska

K. M. Thu, B. Pies, N. Roy, S. Von Essen, K. Donham

Abstract

This article summarizes the responses of 56 farmers in six different farmer focus groups in Iowa and Nebraska to the development of a Certified Safe Farm (CSF) program. The premise of the CSF is to use reductions in health insurance rates and/or other financial incentives to motivate farmers to become healthier and safer. A number of major midwestern insurance companies, farm groups, agribusinesses, and agricultural health and safety specialists are involved in this initiative which is developing in three stages. Stage one, completed in 1996, consisted of six farmer focus groups in Iowa and Nebraska to gauge receptivity to the initiative and gain input on how a CSF Program should be built. Stage two, completed in 1997, was the development of the CSF system which consists of three components: (1) an on-farm safety review; (2) an agricultural occupational health screening; and (3) an educational exercise. Stage three consists of test piloting the system in Iowa and Nebraska over two years from 1998 to 2000. This article provides a synopsis of stage one, the results from the farmer focus groups conducted at an initial stage to qualitatively assess whether the CSF concept was viable from farmers' point of view and, if deemed viable, how to develop the CSF. Findings from the farmer focus groups revealed no major barriers to the development and testing of the CSF program, but did expose a number of considerations subsequently incorporated into the CSF model.

Keywords. Farm safety, Farmer health, Insurance incentives, Certified Safe Farm, Injury prevention, Qualitative data.

A growing body of agricultural health and safety research is showing that education alone is inadequate to reduce the inordinately high rates of agriculturally related fatalities, injuries, illnesses, and disease. A number of studies (Elkind, 1991; Murphy, 1981; Rodriguez et al., 1997; Silletto, 1976; Williams, 1983) consistently suggest that targeting an assumed deficit in farmer safety knowledge is not an effective strategy to induce change in behaviors, particularly

The authors are **Kendall M. Thu**, Associate Director, Iowa Center for Agricultural Safety and Health, Institute for Rural and Environmental Health, 100 Oakdale Campus, 124 IREH, The University of Iowa, Iowa City, Iowa, **Barbara Pies**, Education Specialist, University of Iowa, Institute of Agricultural Medicine, Oakdale Campus, Iowa City, Iowa, **Natalie Roy**, Coordinator, Certified Safe Farm Program, Institute for Rural and Environmental Health, 124 IREH, University of Iowa, Iowa City, Iowa, **Susanna Von Essen**, Associate Professor, University of Nebraska Medical Center, Omaha, Nebr., and **Kelley Donham**, Director, Center for Agricultural Safety and Health, University of Iowa, Iowa City, Iowa. **Corresponding author:** Kendall M. Thu, Institute for Rural and Environmental Health, 100 Oakdale Campus, 124 IREH, The University of Iowa, Iowa City, IA 52242-5000; voice: (319) 335-4224; fax: (319) 335-4225; e-mail: kendall-thu@uiowa.edu.

given that many farmers are highly cognizant of occupational dangers on the farm (Thu et al., 1990).

This research is consistent with findings in other areas such as driver education (Robertson, 1980) and gun safety education (Hemenway et al., 1995) showing the ineffectiveness of traditional educational interventions. However, educational interventions can be effective, such as community-based educational campaigns promoting bicycle helmet use among children shown to be responsible for an increase in safety helmet use (Farley et al., 1996). Other research has demonstrated the effectiveness of community-based educational efforts to reduce the risk of cardiovascular disease (Brownson et al., 1996). However, such success has not been either generally apparent or specifically demonstrated in the agricultural sector as measured by health outcomes or injury reduction. This does not mean that educational efforts in agricultural health and safety should be abandoned, rather they should be closely scrutinized and perhaps redirected. Close consideration should be given to financial and cultural factors that impinge on day-to-day farming conditions that inhibit the effectiveness of educational efforts (Thu et al., 1997; Thu, 1998, and In Press).

An alternative to education is regulation. Regulation as an intervention strategy has been shown to be effective in areas such as automobile seatbelt use (Margolis et al., 1996). In agriculture, a clear example of the effectiveness of regulation comes from Sweden where mandatory retrofitting of rollover protective structures on tractors resulted in the virtual elimination of rollover related fatalities (Springfeldt, 1993). However, additional regulations in the U.S. farm sector are opposed by the vast majority of farmers (Thu et al., 1990) and by the largest farm organizations. Consequently, it is highly unlikely that significant additional state or federal legislation could be passed that would effectively regulate the farm work environment.

There is a need to develop an innovative intervention that recognizes the shortcomings of traditional educational approaches and the political reality that additional legislated regulation of farming is unlikely. The Certified Safe Farm (CSF) concept is offered as an alternative that builds on the traditional "three Es" approach.

The Certified Safe Farm Approach

The CSF program is a voluntary, community-based preventive approach to farmer health and safety based on financial incentives for farmers participating in the program. It is designed to reduce excessive injuries and illnesses among farmers and related medical and insurance claim costs. The program consists of three components*: (1) preventive health screenings targeting high risk conditions for farmers and their families; (2) an on-farm safety review to identify and remove safety hazards; and (3) an educational exercise on farm safety. Participating farmers who successfully complete all three components of the program would be eligible for an insurance rate reduction or other type of financial incentive.

Major midwestern insurance carriers are involved in our CSF planning group and have indicated a willingness to explore creating CSF insurance products. This is in

* The details of the three components of the CSF are beyond the scope of this article. We expect that subsequent articles will provide fuller discussion of the development of these components accompanied by an assessment of their use and effectiveness in the pilot testing stage of the CSF program.

part because of the cost of insurance claims associated with agriculturally related injuries and illnesses. An insurance claims analysis conducted by Blue Cross/Blue Shield of Nebraska showed that while the rate of physician utilization in rural areas is lower than the overall standard, the rate of physician utilization for injuries in rural areas was significantly higher than the standard (Wirka, 1996). The analysis also revealed a significantly higher inpatient claim rate among rural lines of business than the standard for a number of illnesses such as respiratory disease. While these data do not sequester farm specific data from the general rural population, they are nonetheless highly suggestive that the inordinately high rates of agriculturally related injuries and illness measured in numerous surveillance and research projects in the U.S. and other industrialized countries may well be manifested in the cost of elevated health insurance claims. Consequently, it stands to reason that an approach to farmer health and safety that employs a financially based incentive that benefits farmers, insurance companies, and agribusiness, creates a potential win-win situation by providing the motivation for farmer participation and work environment corrections while simultaneously providing mutual financial benefits. Such an approach may also simultaneously remove some of the barriers that impede traditional educational approaches by incorporating agricultural health and safety issues into mainstream farm management and household financial considerations instead of taking a backseat to other farm management considerations. However, a seemingly sensible approach developed by professional agricultural health and safety specialists may not necessarily be what farmers themselves want or even be willing to accept. Consequently, it was critical to get farmer input prior to the development of the CSF initiative.

The CSF program was conceived and is developing in three stages, with the second and third stages dependent on results from the first stage. These three stages are: (1) focus groups among farmers in Iowa and Nebraska to gauge their receptivity to the CSF concept and gain input on whether and how a CSF Program should be built; (2) development of the CSF system; and (3) pilot testing the CSF system. The CSF project is currently in stage three. The pilot testing is being carried out as a controlled research study among 300 randomly selected farmers in a nine-county area of northwest Iowa. For two years, 150 farmers randomly assigned to the intervention group will receive the CSF program and outcome data will be compared with a control group of 150 farmers who did not go through the CSF program. All of the first-year intervention farms will likely complete the CSF program by the end of 1998. The CSF intervention will then be repeated for a second year and data among both the controls and intervention farms are being tracked for the full two-year cycle. A more complete description of the CSF research design and results will be reported in subsequent publications. The focus of this article is on the results from the farmer focus groups in stage one which provided an important foundation for proceeding with the development and testing of the CSF concept in stages two and three.

Focus Group Methods

With funding from Pioneer Hi-Bred, International, a series of six, farmer-focus-group interviews were conducted in the fall of 1996 to assess farmers receptivity to the CSF program and to gain their input on how such a program should be developed. Six counties in Iowa and Nebraska representing diverse agricultural areas were selected for farm-focus-group participation.

Focus groups are a demonstrated technique of data gathering used to understand why people hold the views they do. As Krueger describes them, focus groups are “planned discussions to obtain perceptions on a designed area of interest in a permissive environment that is nonthreatening” (Krueger, 1994:6). Polls, questionnaires, and surveys provide a population-based assessment of views usually based on a limited range of response options. Such data do not provide an opportunity for respondents to explain why they hold particular views. In developing the CSF program, we were interested in farmers’ detailed qualitative assessments and perceptions of the CSF concept and why they held their views. Such an approach allowed us to not only assess farmers’ receptivity to the CSF concept, but also the factors underlying their views in order to understand the details of how to build the CSF program.

The focus group data gathering methodology was based on the work of Richard Krueger (1994) and established methods of qualitative data collection and analysis in cultural anthropology (Agar and MacDonald, 1995). The focus group approach was developed by this article’s primary author who is a cultural anthropologist trained in methods of qualitative data collection and analysis and the article’s second author who received focus group interview and data collection training through Richard Krueger’s Focus Group Seminars at the University of Minnesota. She was the principle moderator and focus group leader on this project.

A key component of focus groups is the discussion among participants who share ideas and engage each other as part of the response to trigger questions from a trained moderator. Because of the group dynamic, focus groups differ from personal interviews which may also use open-ended response questions to elicit qualitative data. Focus groups are not intended to be reflective of views from a population based representative sample. Consequently, there is no salient statistical calculation for the number of participants recruited. Rather, recruitment is usually based on logistical considerations and the purpose of the data collected. The primary criterion for recruiting CSF focus group participants was the need to reflect differing areas of Iowa and Nebraska representing differing types of typical farming in those states, including cattle, hog, corn, soybean, alfalfa, and milo production. To accomplish this, three counties in each state were identified to reflect different types of farming areas.

The target number of participants for each focus group was approximately 7 to 10 farmers following recommendations from Krueger (1994:6). Farmers in the selected areas were recruited utilizing several approaches. Mailings were sent to a random sample of approximately 60 rural zip codes in each county. In addition, County Extension Agents assisted in the recruitment by submitting articles in local newspapers, conducting radio announcements, mailing letters to farmers, and making personal contacts. Both men and women were encouraged to participate. There was an average of nine farmers per focus group session with a range of 4 to 15 farmers. As an incentive to participate, farmers were paid \$25 and provided a meal. A total of 56 farmers representing a range of farms participated. Agricultural operations included: hogs, feed cattle, dairy, horses, corn, alfalfa, soybeans, milo, and apple orchards. Size of operations was also diverse with a range of 80 to 1,700 acres of farmland. Among the 56 farmers, 7 were retired and 18 were women.

The settings for the farmer focus groups were community locations readily accessible by farmers and comfortable environments for informal interaction. These were primarily meeting rooms in local restaurants, but also included a fire department meeting room, and basement of a local bank. Each focus group session lasted from two to four hours and was led by the primary focus group leader who led the discussion by posing a series of open-ended trigger questions, the responses to

five of which are summarized here. The questions were developed by the CSF project leader (the primary author) with comment and input from an advisory committee consisting of representatives from insurance companies, farm and commodity groups, agribusiness leaders, agricultural health and safety professionals, and farmers. At the outset of each session, the moderator provided a uniform set of background information, including a description of the general purpose of the session and the procedure to be followed to collect input during the session. The role of the moderator was confined to posing questions and allowing farmers to respond and interact with minimal interference. The moderator would interject questions for purposes of clarification or to pursue lines of discussion as they naturally occurred among the farmer respondents. However, the moderator would do so only insofar as she was following ideas or discussion instigated by farmers. It was also the role of the moderator to elicit comments from farmers who were generally silent or subdued during the general discussion to ensure the inevitable conversational dominance by a few was counter balanced with the views of others. All comments were tape recorded and transcribed. In addition, detailed handwritten notes were kept by the assistant moderator. Following each focus group session, the primary points of the focus group discussion were read back to the farmers to ensure accuracy and to provide opportunity for clarification. Both the recorded transcripts and written notes were then compared and summarized.

Farmer Focus Group Results

Summary results from the trigger questions most salient for assessing farmer receptivity to the CSF concept and factors to be considered in developing a CSF program are presented below. Analysis of results was performed by categorizing and indexing responses in the electronic text transcribed from the focus group tape recordings. The presentation of farmer responses to each question below are standardized to include a summary paragraph, a list of typical farmer concerns or comments, and a sample of direct quotes from farmers that typify responses to the question.

Trigger Question 1: How do you feel about modifying your work environment as part of a voluntary Certified Safe Farm Program if you knew you would receive adequate compensation in the form of insurance reductions?

Farmers generally responded favorably to modifying their work environment to make it safe. They felt that the incentive of an insurance reduction, or some other financial incentive, would be needed in order for farmers to act on making safety modifications. They observed that most farmers are aware of safety hazards on their farm but do not correct them for a variety of reasons, including financial limitations, lack of time, and the belief that they will not get hurt. Some farmers felt that unknown safety hazards might be discovered by having someone conduct a safety check. However, farmers also raised a number of specific issues and questions regarding making modifications to their work environment as part of a CSF program.

- The program should not be mandatory.
- Farmers need to have input on what modifications should be made.
- It will be difficult to develop the check list because every farm is different.
- Who will be the expert to write up the guidelines?
- Who will monitor the program?

- Will insurance reductions result in higher premiums in the long term?
- Farmers' willingness to make changes will depend on whether realistic modifications are required.

Typical Comments

- “That’s (insurance reduction) what it will take to get us to do something. We know it would be safe to do something a little differently but it’s not convenient so we don’t mess with it. If we knew there were some kick backs and we could see it on paper that it’s going to help us, I would be more inclined to make safety modifications.”
- “That sounds like a good idea but I think we’re just whistling Dixie if we think the insurance companies are ever going to modify their premiums — it ain’t going to happen.”
- “I think I would be willing to participate in the safety modifications. Farmers do not like to be told what to do. Rules are often written by people who have never been on a farm. But if you offered an insurance reduction as a benefit, I’m sure you’d get a lot better participation.”
- “I can see for this to work, on the insurance companies part, both of those — health and safety — have to go hand in hand. Just being screened and saying yeah, a clean bill of health, if your farm is a wreck and just an accident waiting to happen, then the one has defeated the other.”

Trigger Question 2: How do you feel about participating in farm health screenings tailored to the farming occupation as part of a voluntary Certified Safe Farm program if you knew you would be compensated in the form of insurance reductions?

Farmers were notably strong in their positive views toward participating in agricultural health screenings which they believed would be beneficial to their health. They admitted that they should have regular physicals, but indicated many farmers do not because of financial limitations, lack of time, and because they are afraid of discovering a health problem. If there was a financial incentive to attend they would be more likely to use such services. Specific issues and suggestions:

- An annual screening as part of a CSF program would be beneficial to both the insurance companies and farmers because health problems could be prevented while reducing long-term health costs.
- Require a specific time period to complete the screenings.
- Offer them during the winter months when farmers have more time.

Typical Comments

- “I have been very surprised for years that the health insurance companies don’t offer a type of health screenings and testing to me, it would save money in the long run to prediagnose and catch in the early stages some of the things that are happening to us. I think it would be a benefit to everybody. It would probably reduce health care costs.”
- “I’d be interested in a health screening type deal, at the proper time of the year when I’m not so busy.”
- “I think that health wise it would be good. We are suppose to have physicals but too many people our age don’t do it because they can’t afford it. Plus the time that is spent they just don’t take the time to do it.”

Trigger Question 3: What things should be looked at to certify a farm as safe and what would make it difficult to make these safety changes?

Since costs may be high, it was suggested that a set of safety priorities be developed for farmers to focus on in the first year and address other hazards the following years. Farmers cited financial expense and time requirements as the two most significant barriers to making the safety changes. Another concern was that even if a farm was certified as safe, accidents would still occur due to human error. In addition, it was mentioned that things on a farm change from day to day, everything might be safe one day but not the next. However, farmers mentioned the following as items that should be considered in order to certify a farm as safe:

- Safety equipment such as PTO shields, ROPS, cages on skid loaders and guards should be in working order and in place.
- Wiring underground instead of overhead.
- No clutter lying around.
- Hog confinement buildings — standard levels for dust, gas and odor, and monitored with gas detectors.
- Proper storage of pesticides, fuel, livestock medicines, and other chemicals.
- Water testing.
- Condition of equipment, especially older equipment.
- Ladder safety, especially ladders on buildings.
- Stairways in buildings (loose and broken boards).
- Livestock facilities to include gates and fences.

Typical Comments

- “Aside from the cost of putting ROPS on, it’s the idea of taking time out to do other safety checks. Cost would not be great. Cost for shields would not be prohibitive.”
- “That’s the problem with safety improvements, they don’t show the direct dollar return, so how are you going to get around the cost? It is hard to make yourself do it until you do see its effect. Maybe the CSF idea is the way to do that.”
- “There’s a lot of things to consider if you want to certify a farm as safe. I don’t think you’d ever get one completely certified safe, I think it’s almost impossible.”
- “You could be certified safe one day and two weeks later there could be a bunch of things wrong. You’d have to be checked constantly. Not that that would be bad, but who’s going to pay for having someone running and check all that and keep tabs on that. I guess it depends on what the requirements are and how it’s going to be paid for.”

Trigger Question 4: What method would be acceptable to assure insurance companies that you have made the appropriate safety modifications?

This question yielded mixed responses and generated the most discussion. Farmers are often acutely wary of having anyone come out to their farm and tell them what to do with tacit regulatory undertones even in a program that is explicitly voluntary. However, some farmers felt that having an on-farm inspector would be needed to get the modifications done. Many farmers may not like the idea of having an inspector come to their farm, but if the financial incentive was great enough they

would be willing to participate. Several typical observations and comments were made:

- Farmers stated that inspections are already required before a property insurance policy is issued, renewed or when changes have been made. So it is not a foreign idea to them.
- Several farmers felt that having an inspector would not work. Rather, a self audit with a check list submitted to the insurance company would be acceptable.
- A concern expressed about the self audit was that some farmers would not make the safety modifications.
- Random inspections or spot checks were suggested to ensure modifications are made.
- Sending a brief quarterly newsletter with safety tips or a postcard as a reminder was also suggested.
- Another concern was quality control and consistency; different inspectors may conduct inspections that are inconsistent with each other. This may result in different safety standards which could create confusion and conflict.
- It was suggested to have pooled policies for local groups of farmers to ensure consistency and to make farmers within the group accountable to each other.

Typical Comments

- “If you had self reporting they (insurance companies) would have to do spot checks.”
- “The honor system is a good approach (self audit), a lot of farmers are honest people. Ramrodding it down their throats won’t work.”
- (regarding inspector) “Has to be someone who is knowledgeable about agriculture.”
- (regarding self reporting) “The program would die because you are going to have some farmers not making safety changes. Wouldn’t be fair for those who do make the safety changes.”

Trigger Question 5: What type of deduction would be most beneficial and how would you expect to be compensated in insurance reductions for participating in the farm safety review and health screenings?

The majority of farmers felt that a deduction in their health insurance would be the most beneficial since it is among their largest expenses. However, they also suggested investigating reductions in property and liability insurance. They also pointed out that the financial incentive is an important motivator and as such it could come from any number of sources related to farming, not just insurance.

- A 10-25% health insurance premium reduction was suggested as a level that would motivate farmers to participate in the CSF program and make the necessary corrections in their work environment.
- Farmers felt that the reduction should pay the total cost of the health screening and cover at least the major expenses in making on-farm safety modifications.
- There was recognition that farmers become accustomed to farm hazards. It was suggested that a well-tailored program to point out problems might dispel their complacency.

Typical Comments

- “The incentive has to be in some type of premium cost reduction. If you meet the standard your premium can be reduced by 10, 15 or 20%. Lowering the deductible might also be a consideration.”
- “I think health insurance would probably be the biggest bill and would be appreciated if there was a break. I think our property and liability insurance is reasonable, but the health insurance continually takes some pretty big jumps.”
- “If you can show a good record (no accidents) with no claims your premium should be reduced.”
- “I think there are some things we don't realize are dangers because we live with it every day. Maybe if somebody were to come and point out a few of those things it would help.”

Conclusions

Without the rich qualitative data captured through a focus group process, much of the input needed to properly construct the CSF program would have been lost and the resulting project development made more difficult if not impossible. The results of the farmer focus groups indicated to CSF planners that there were no major barriers to preclude us from moving forward with the development and testing of a CSF program. However, farmers raised a number of issues that were subsequently addressed in the development and testing stages of CSF. For example, we have made it clear that the Certified Safe Farm program is voluntary and has no association with governmental regulation. In addition, we have continued to pursue health insurance premium reductions as an important source of the financial incentive, but have expanded our planning to consider a larger universe of financial incentive sources.

To address farmers' concerns about the on-farm safety review, an extensive standardized, though still flexible, on-farm safety review protocol and scoring system was developed and tested to capture the wide range of farm variations in Iowa and Nebraska. Local farmers have been trained and are conducting the on-farm safety reviews in the pilot stage to respond to concerns that the on-farm reviewers be versed in farming. In addition, CSF farmers work closely with the on-farm safety reviewer to choose from a range of priority work environment hazards to correct. And virtually all of the farm hazards suggested by farmers to be included in the on-farm work environment checklist have been adopted in the CSF. Moreover, the cost of the corrections needed to certify the farm has been kept in line with the financial reimbursement received and farmers have been urged to consider the modifications on an evolving priority basis as they receive their yearly reimbursement for being certified. To address the issue of verifiability, farmers must sign off to indicate needed corrections have been made and the possibility of a random spot-check is agreed upon up-front.

The favorable response to agricultural preventive health screenings voiced in the focus groups has continued in the pilot testing of the CSF. To further accommodate farmers' concerns, the preventive screening component of the CSF has been scheduled at slack work times and conducted by community-based health staff with roots in the local agricultural community. The preventive health screening is tailored specifically to high risk agricultural illnesses and diseases with detailed attention to occupational exposures specific to individual farms.

The pilot testing of the Certified Safe Farm Program began in the spring of 1998 and will continue for two years. A number of health outcome and injury measures

are being used in conjunction with data gathered from the on-farm safety reviews, personal protective equipment use, behaviors, attitudes, health status, clinical screening results, and a series of other measures to assess the program. We look forward to reporting the results in the near future with a more detailed description of the actual CSF program. Nonetheless, it has been clear through the course of the development and pilot testing stages that input from farmers in the focus groups at the outset, combined with farmer representation on the project advisory committee, have been central elements in enhancing the possibility of project success.

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