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The Certified Safe Farm (CSF) is a comprehensive total worker health program consisting of producer/farm manager education, third party on farm safety and health review, and clinical occupational health and wellness screenings. Nearly 1000 farms have gone through the program to date, and there is important data that indicates farms that qualify as a CSF, have reduced injuries, illnesses, and lowered health care costs. The 24 member National CSF Coalition members aim for this program to become nationally available and sustainable. The success of this program will depend on incentives (defined economic benefits) to producers from their insurers, their agribusiness service and suppliers, and farm organizations. Success also will be dependent on realized incentives to agribusiness supporters of CSF farms including gaining a loyal productive customer base, marketing and public relations advantages. The tag line for this program is: **“keeping farmers, their families, their workers and their supporting agribusinesses alive and well through mutual incentives”**



The CSF is versatile in that it can be tailored to small family farms, local production farms, as well as large farms with many employees.



The following manual describes the program, its components, and implementation.

The original of this manual came from the 1996 – 2006 Certified Safe Farm Program of Iowa’s Center for Agricultural Safety and Health (funded in part by NIOSH, Farm Bureau of Iowa, Monsanto, Blue Cross-Blue Shield, and Pioneer Hi-Bred). This revised version was developed

for the purpose of **expansion to a National CSF program**. The contents of this National CSF Manual consists of revised elements of the 2006 version of the Iowa CSF program manual and new components developed by members of the National CSF Coalition. This National CSF Manual has been vetted by the 24 member National CSF Coalition. The following persons are members. Those highlighted in yellow are section authors.

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Introduction

Certified Safe Farm (CSF) is an innovative and comprehensive health and safety program for agricultural workers. The CSF program was designed in Iowa and implemented as a random-controlled research and program evaluation project from 1996-2006. CSF was developed using science-based theory to provide farm owner/operators and managers with proven strategies to reduce the risk of occupational illness and injuries. The program is associated with reduced direct and indirect costs including lower healthcare costs, reduced worker absenteeism, an increase in productivity, and the ability to attract and retain high quality employees.

Over ten years of research in Iowa and later in North Carolina found that Certified Safe Farms are associated with improved respiratory health, reduced severe injuries, reduced health care costs, and increased use of personal protective equipment. A full list of peer-reviewed, scientific articles documenting the evidence basis and results of this program can be found in the References section.

The Certified Safe Farm program combines traditional and innovative methods into a comprehensive prevention program, which is built on mutual incentives for farmers, insurers, and agribusiness. The aim is that the CSF farmer receives lowered insurance rates and discounts on farm services, supplies and equipment. The insurers and agribusinesses receive a loyal, safe, and healthy customer base that has fewer insurance claims. The CSF program rewards success and motivates efforts towards effective injury prevention.

Executive Summary of the CSF Program

The CSF program consists of three major integrated components:

1. The clinical occupational health and wellness screening
2. The on Farm Safety Review, and
3. Farm owner/operator/manager health and safety education

Note the figure below is a pictorial metaphor of the CSF program, where the body of the program (the tractor) has the three major components (education, health screening, and on farm safety review). The fuel and the motor for the program are incentives from insurances and agribusinesses. The product growing in the field is the Certified Safe Farm and the accompanying improved health of its owners, family, and worker, as well as reduced injury and economic risk. The program has been trademarked as has the logo. The logo is seen in the following images. The CSF Coalition (see above) have come to consensus on major operating principles of CSF **(details of the consensus protocols are seen in Tab 10 appendix CC.1)**. For those achieving CSF certification, a sign with the trademarked logo can be put at a visible location on the farm, with indicators as the date and review level certified. To accommodate regional/production/worker demographic variations, modification of the components of the program can be made by written request and justification to the CSF National Consensus Coalition Committee. The committee will review the request for consistency with the basic

tenants of the CSF program, and the logical connection of the request with the regional situation. A 60% approval of the request by the committee equals consensus.

Each of the CSF components is described in detail in the following body of this manual and its appendices. Each of these components has standards and competencies that must be attained by examination before the farm can become certified. The farm may become certified at one of three levels; the bronze level requires one of the three elements to be achieved, the Silver, two elements, and the gold level requires achievement of all three elements. The recommended incentives for the different levels of achievement are graded. Just for example, the bronze level may be awarded insurance discounts at 3%, the Silver 6%, and the gold at 10%. (Note these are provided only as an example. The specific incentives would have to be determined via negotiations with specific agribusinesses.



Program Benefits

Certified Safe Farm benefits both large farms with employees as well as small farms based on four simple facts:

- Potential lowered premiums for insurances (Property casualty, liability, workers compensation, and health)
- Healthy employees are more productive than unhealthy employees.
- It costs less to prevent injuries and illnesses than treat them after the fact.
- Reduced liability from occupational and incidental injuries on the farm by risk management.

The CSF program addresses families' and employers' needs for protecting their bottom lines through a total comprehensive total worker health, risk, and injury program by providing:

- Preventive occupational health screenings (e.g. pulmonary function and hearing testing, skin cancer screening, musculoskeletal injury, and pesticide exposure screening);
- General wellness screening for (e.g. blood pressure, cholesterol, diabetes)
- On-farm safety reviews which have a direct effect on farm-related injuries, illnesses, and fatalities through identification and remediation of hazards
- Selection and fitting of personal protective equipment tailored for the specific farm.

- Personalized and group educational opportunities through newsletter and in-person meetings
- Potential incentives to farmers for those certified from insurances, farm equipment dealers and manufacturers, farm service and supply businesses among others.

The following graph, Figure 1, indicates the annual “savings for farm related medical expenses for CSF Farm, compared to matched control farms. Figure 2 indicates that greater savings of medical care expenses is associated with higher safe scoring CSF Farms.

Figure 1. Farm Safety Scores and Annual Illness and Injury Costs



Program Management

The CSF program provides flexibility to employers in addressing the multitude of needs of each operation, be it small family farms, alternative farms, large farms with employees, as well as farms of different types of agricultural production. There are two options for delivering the CSF health and safety program to agricultural operations.

- An in-house program can be tailored to each operation with a trained healthcare provider and a farm safety manager. However, a key to the program is that a trained CSF reviewer is an independent third party to help maintain the high standards of performance and credibility of the program and to ensure that all procedures are consistent with CSF requirements. The CSF program will train the healthcare provider, the farm safety manager, and the CSF reviewer to identify and remediate health and safety conditions or risks with a continual ongoing program fully performed by company staff. CSF personnel would provide training, educational modules, and quality assurance to the on-going program.
- The company can outsource the health and farm safety program to CSF staff that provides annual screenings and safety reviews for the farm. A needs assessment will be developed and in-house personnel will be responsible for performing the duties which will be reviewed at the next CSF provided visit.
- Detailed communication and data management nationally and regionally will be facilitated by a web-based tool on the National Agricultural Safety Database (see section “National Agricultural Safety Data Base Management Tool”).

Implementation Models

There are two existing models for implementing Certified Safe Farm; (other models may be explored through the discussions of the National Certified Safe Farm Coalition):

- The Iowa model relied on a network of local AgriSafe clinics to identify local agriculturalists to undergo training to conduct the On-Farm Safety Review/Audit, while the AgriSafe providers conducted the occupational health services. The overall program coordination, including reviewer/auditor training, was conducted by the University of Iowa's Center for Agricultural Safety and Health.
- In North Carolina, Certified Safe Farm is implemented through a collaboration of NC State University (NCSU), NC Cooperative Extension, and the NC Agromedicine Institute (a partnership of East Carolina University, NC State University, and NC A&T State University) and its AgriSafe-NC Network. NC Cooperative Extension County Agents and the and NCSU Agromedicine Extension Assistant, led by the NCSU Agromedicine Information Specialist, conduct the On-Farm Safety Review and coordinate with others on all aspects of the program implementation. AgriSafe health services are coordinated and conducted by NC Agromedicine Institute personnel, including a small network of part-time local providers. This NC adaptation was piloted with funding from the NC Tobacco Trust Fund Commission (NCTTFC) in Johnston, Sampson, and Duplin counties during 2009-2012. Through a second grant from the NCTTFC (2013-2016), NC expanded the program to 30 counties.

An overview of Certified Safe Farm in North Carolina may be found at:

<https://appliedecology.cals.ncsu.edu/certified-safe-farm/>

The Certified Safe Farm program is a comprehensive total worker health program that combines safety, health and wellness, and education components to support an overall approach to improved farm safety and health. This manual prepares agricultural professionals (e.g. Extension agents, university safety specialists, insurance company inspectors) with the necessary knowledge and skills to implement the Certified Safe Farm program in partnership with coordinators and collaborators. Farm operators having achieved CSF status receive a plaque to notify the public and employees of this high achievement. The two CSF logo images that follow are trademarked. The first is the "drive way" sign that is posted at the entry to the farms, or other prominent place that signifies the farm has achieved certification.



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This logo is the “official” logo that should be placed on all other appropriate materials related to the CSF Program. Appropriate additions to these basic logos are allowed as per the CSF Coalitions protocols (**Appendix CSF.1**) to indicate regional organization associates and/or level of CSF certification.



CSF Data Management

Communication among CSF staff, secured farm review and health data, and producer education programming will be managed by delegated CSF portals on the National Agricultural Safety Data Base (NASD) web site. Further, the producer education component will be managed on a separate NASD portal. Details of these portals are described later in this manual (see section “National Agricultural Safety Data Base Management Tool”).

Farm Safety Review Component

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Introduction

An essential component to CSF program is the Farm Safety Review. A checklist has been designed, based on surveillance data that identifies common safety and health hazards on agricultural operations, the extent of risk-benefit, and potential for practical economical sensitive remediation. Modification of this checklist can be made according to the different types of production systems. Procedures for checklist modification are seen under “Consensus protocols” in this manual. The effectiveness and trustworthiness of the reviewers are essential to the CSF program, which is based on their technical and cultural qualification and training.

CSF Checklist for On-Farm Safety Review Protocol

This is the checklist necessary to complete a CSF farm safety review to be used by a reviewer who has completed the Farm Safety Reviewer Training outlined in this manual. The review covers machinery, buildings, and work environments. The farm must score 85% or higher to pass the review and become certified. Although the goal of the CSF program is to reduce illnesses and injuries, we recognize that all farm-related illness and injuries cannot be eliminated. Please keep in mind that:

- The CSF farm safety checklist covers some typical hazards, and is not an exhaustive list of all potential hazards.

- It is not possible for the farm safety reviewer to observe all potential hazards in the limited amount of time he or she spends on the farm.
- The review provides a snapshot of conditions at one point in time, and conditions will change over time. Unpredictable weather and animals, breakdown of equipment, and other conditions can create hazardous situations even on the safest farms.
- **Appendix FSR.2 “Basic Farm Safety Review Check List Results summary”** images the review summary sheet. There are several review check lists, tailored for the region and specific crops and livestock production practices”.

On-Farm Safety Review Protocol

- All CSF farmers will receive the on-farm safety review tool prior to their first on-farm review, ideally at the time of their first health screening (**see Appendix FSR.1 – “Producer Preparing for the farm Safety Review”**).
- All farmers will be asked to keep track of any items that they correct prior to their first farm visit. These changes will also be recorded by the reviewer at the time of the farm visit.
- All on-farm reviews must take place with the principal farm operator present, at a minimum. It is preferred, but not required, that other family members and employees or an employee representative participate in the on-farm review process.
- On-farm safety reviewers for the producers’ convenience, can sell PPE, safety materials, equipment, etc. from their vehicle when they are conducting on-farm reviews. However, options should be communicated to the producer of other places and relative prices to purchase prescribed materials and equipment. If local funds are available that allow the provision of free safety stickers, SMV’s, etc., then they can be distributed by the reviewers, if they should choose to do so. All farm reviewers will have resources related to purchasing PPE, in case the farmer needs to buy additional PPE.
- All farm safety reviewers will be independent contractors, unless they are already employed by a local hospital, public health department, etc. In most cases, the local CSF center will not provide liability coverage for the reviewers. However, information will be provided where they can self-purchase liability coverage. This information will be relayed to all potential reviewers during their training.
- The on-farm safety reviewer is not required to be a current farmer. However, it is required that the reviewer have some farming experience or background.
- The local CSF center/farm reviewer will be responsible for entering the on-farm safety review scores and creating corrective action sheets (**see Appendix FSR.4 Corrective Action Sheet**).
- All potential reviewers are required to attend training, and must pass a written examination and an on-site examination before they are allowed to perform on-farm reviews for the CSF program.
- As a part of the reviewer training, the educational component will now include information on PPE use, how it prevents various farm-related health problems, and how to properly store and clean it and what PPE are recommended in specific exposures (**See Appendix FSR.5 and Appendix CS.6 [The Mother Box Program]**).
- All farm safety reviewers will receive a checklist of items that they must discuss (when applicable) during their on-site reviews hazards for special populations for example senior farmers (>60 years old, working woman, youth under 20 years, foreign-born workers). The checklist will contain items that are specific hazards for these special populations.

- All farm safety reviewers will assist in assessing disability of farmers. If limitations are noted, the information will then be relayed from the reviewer to the local clinic nurse.
- As a quality assurance measure, QA auditors will be responsible for spending one day (=at least 2 reviews) with each active, CSF farm safety reviewer each year. He/she will conduct the reviews with the reviewer present and at completion of each review, they will compare scores and discuss any discrepancies in scoring.

The full CSF Farm Safety Review Checklists can be found on the CSF portal of the National Agricultural Safety Data Base (NASD) web site (<http://csfadmin.nasdonline.org/>).

Farm Safety Reviewer Qualifications and Training

(Author: Julia F. Storm; Date: 02-17-2016)

Introduction

This course prepares learners to have the background knowledge and skills to conduct the On-Farm Safety Review/Audit to evaluate farms for safety hazards, advise and facilitate farmers to accomplish practical safety solutions, and be an effective member of the Certified Safe Farm implementation team.

How does this fit with the CSF Program

As developed, the On-Farm Safety Review/Audit component should be conducted by an individual with a background in agriculture who has completed in-person and classroom training and demonstrated knowledge, skills, and cultural competence through written and practical exams to conduct an unbiased and accurate safety review/audit. Experience in agricultural safety inspections is encouraged.

The On-Farm Safety Reviewer/Auditor Training described herein provides a standardized curriculum for on-farm-safety reviewers to achieve the knowledge and skills to be competent in carrying out the On-Farm Safety Review/Audit component of the CSF program. It also prepares On-Farm Safety Reviewers/Auditors to have sufficient understanding of the entire program to work effectively as part of the implementation team.

Who is the intended audience?

The intended audience includes agricultural professionals with interest and/or experience in agricultural safety and health. This may include Extension agents, university specialists, agricultural health and safety professionals, insurance industry inspectors, public health educators, AgriSafe health providers, or industrial hygienists.

Who will administer it?

It is recommended that instructors of this training have credentials demonstrating successful completion of both the Agricultural Medicine Core Course and the On-Farm Safety Reviewer Training, as well as CSF implementation experience.

On-Farm Safety Reviewer/Auditor Training will be administered online and in-person by those with having the appropriate credentials and experience implementing the Certified Safe Farm program, or with similar experience in farm safety inspection, such as in the insurance industry or government agency. The *online sessions* are learner-driven and will be accessible via the NASD CSF portal. The *in-person training* will be administered by credentialed instructors. These may be members of the National CSF Coalition with implementation experience and training credentials, or members of several state-based implementation teams, including the University

of Iowa/I-CASH, North Carolina State University, NC Agromedicine Institute, and the University of Nebraska Medical Center's Central States Center for Agricultural Safety and Health who have experience delivering the training.

A schedule of in-person trainings will be maintained on the NASD CSF portal (**see details of the NASD portal later in the manual**). As the CSF program is implemented more widely, additional experienced and credentialed trainers will be developed to extend the availability of the in-person portion of the training.

Program Details

History of this module's use

The content of this module and its associated learning resources, including PowerPoint and online content and on-site leader's guide for in-person training, was compiled from original content developed by Julia Storm and Tim Britton of North Carolina State University, as well as content contributed by Certified Safe Farm experts from the University of Iowa (Kelley Donham), the University of Nebraska Medical Center (Risto Rautiainen), and the NC Agromedicine Institute (LaMar Grafft, Jessica Wilburn, Robin Tutor-Marcom). The learning resources have been used in four separate trainings (46 total participants) delivered in North Carolina during 2013-2015 by Julia Storm and Tim Britton, with contributions by Barbara Gallagher, RN and Jessica Wilburn, MSN.

Objectives

This course prepares learners to:

- understand the serious safety and health issues that make agriculture one of the most hazardous industries in the United States,
- understand the underlying concepts that make Certified Safe Farm an effective intervention,
- conduct the On-Farm Safety Review/Audit component of Certified Safe Farm,
- provide one-on-one education to farmers about safety hazards and solutions during the on-farm safety review,
- assist farmers in accessing incentives and other available resources,
- effectively market and promote the program locally,
- coordinate with AgriSafe health providers to make occupational health screenings available to farmers, their families, and employees,
- provide recognition to farmers who complete the program, and
- collaborate with coordinators, trainers, and others for overall program implementation and evaluation,
- consult with the farmer to determine if their operation is subject to OSHA and/or the EPA worker protection standards, and prepare them to meet those prescribed regulations.

For the Facilitator

Instructors of this training should have successfully completed both the Agricultural Medicine Core Course and the On-Farm Safety Reviewer Training and have experience implementing the Certified Safe Farm program, or similar farm safety inspection experience. The online sessions are learner-driven. A leader's guide for delivering the in-person training portion will be accessible via the NASD CSF portal.

Description of the program

This training prepares agriculture professionals with the knowledge and skills to conduct the On-Farm Safety Review/Audit component of CSF. The training also prepares these On-Farm Safety Reviewers/Auditors to work within the Certified Safe Farm implementation team. The Certified Safe Farm program has historically been implemented in partnership with collaborating entities, including a university coordinating partner at a land-grant university and its Extension system, a coordinating partner at a health professions/public health university, local county Extension centers, and local AgriSafe health providers.

The On-Farm Safety Reviewer/Auditor Training is delivered through 4 x 1.5 hour online sessions, and a one-day, in-person training involving on-farm safety review demonstrations and practice. The training prepares learners to achieve the following outcomes:

- Understand:
 - the goals of the program and the importance of agricultural health and safety, by gaining a basic knowledge of national and state agricultural injury and illness statistics,
 - the components of the Certified Safe Farm intervention, consisting of on-farm safety review, AgriSafe health screenings/services, education, and economic incentives,
 - the research basis for the effectiveness of the Certified Safe Farm intervention, including intervention research results from the University of Iowa, and implementation results of the pilot program conducted in North Carolina.
- Recognize common farm safety and health hazards and related injuries and illnesses, and become familiar with the Farm Safety Review /Audit Tool.
- Become familiar with solutions and resources to assist farmers in making recommended safety or health improvements and accessing available incentive-based assistance programs.
- Become familiar with AgriSafe health services:
 - occupational health screenings,
 - PPE selection and fit testing assistance,
 - referrals.
- Become proficient in using the on-farm safety review/audit tool, including:
 - Conducting on-farm safety reviews using the review booklet,
 - Working efficiently as a team,
 - Communicating key safety solutions and resources to the farmer,
 - Entering data into the review spreadsheet and understanding data summary pages, as well as additional modules related to regional agricultural diversity or regulations (OSHA, EPA, etc.).
- Become proficient in communicating and submitting results of the Certified Safe Farm review to **(see Appendix FSR.8):**
 - the farmer,
 - the AgriSafe Nurse Coordinator,
 - the Certified Safe Farm Coordinator.
- Effectively promote and market the Certified Safe Farm and AgriSafe Programs to farmers and supporters, and recognize farmers for successful participation.
- Be aware of partnership and resource opportunities at the local, state, and national/international levels.

Online Sessions

Session 1: Certified Safe Farm Basics content includes the following topics:

- Certified Safe Farm goals and an overview of US agricultural health and safety issues
- Certified Safe Farm components: safety review, health screenings, education, incentives
- Research overview demonstrating Certified Safe Farm effectiveness
- Certified Safe Farm implementation results of the NC pilot project.

Session 2: Farm Safety Review Tool Part 1 content includes the following topics:

- Introduction to the Farm Safety Review Tool: Basic Info and Demographics Pages, Major Categories, Hazards, Operation Concerns, Scoring.
- Recognize common safety and health hazards and related injuries/illnesses in the following Farm Safety Review Tool categories:
 - Tractors,
 - Combines,
 - Gravity Flow, Auger, and Forage Wagons
 - Portable Augers,
 - Riding Lawn Mowers,
 - Skid Steers and Wheel Loaders,
 - Other Machines, Self-Propelled,
 - Other Machines, Non-Self-Propelled,
 - Storage Structures,
 - Chemical Storage.

Session 3: Farm Safety Review Tool Part 2 includes content in these topic areas:

- Recognize common safety and health hazards and related injuries/illnesses in the following Farm Safety Review Tool categories:
 - Swine and Poultry Structures,
 - Dairy and Beef Structures,
 - Machine Shop, Repair Area,
 - Hand and Power Tools,
 - Tobacco Curing Barns,
 - Outdoor Working Environment,
 - Greenhouses,
 - *Packing and Processing (to be developed)*.
- Become familiar with solutions and resources to assist farmers in making safety and health improvements.

Session 4: Implementing other Certified Safe Farm Components includes the following topic areas:

- AgriSafe Health Services overview: occupational health screenings, PPE selection and fit testing, referrals,
- Promoting Certified Safe Farm,
- Overview of partnership and resources opportunities.

Session 5: Understanding OSHA and EPA regulations and facilitating the farmer to meeting their obligations. (Reviewers must read and demonstrate competencies detailed in the following section of this manual (OSHA and EPA relevancy modules).

In-Person Training Sessions

The one-day In-Person Training is delivered on up to two cooperating, private farms or on one appropriate agricultural research station, or a combination of private farm and research station. This in-person training session includes 6 hours of the following hands-on activities:

- Demonstration of use of the Farm Safety Review Tool, examining multiple items in each category for hazards
- Practice in use of the Farm Safety Review Tool in a sampling of categories
- Interaction with farmers or research station staff
- Completion of the Practical Exam by a two-person team of learners.

This in-person session also involves about 2-3 hours of classroom learning involving:

- Demonstration of selected health screenings and PPE selection/fit services by an AgriSafe provider, and
- Final overview/discussion of Certified Safe Farm implementation.

Program and learner assessment

Learner Assessment

Both written and practical exams will be required for learners to be certified as CSF On-Farm Safety Reviewers (formerly auditors). The written exam will be completed individually and may be taken “open book” using only course materials as references. The practical exam will be completed as a team of two participants.

The written exam will consist of 20-25 multiple choice questions, drawn from a pool of standard questions (Iowa and NC existing sources), assessing learner knowledge in each of the 9 learning objective areas, with emphasis on safety hazard recognition, safety improvement solutions, and Certified Safe Farm components and their implementation. A passing score of 70% on the written exam is required for certification.

The practical exam will consist of an on-site, mock farm safety review using the CSF On-Farm Safety Review Tool. The practical exam should include an assessment of a limited number of items/areas in at least 4, but not more than 6, categories. For example, the practical exam should include at a minimum the following:

Category (items):

- Tractor (3);
- Combine (1);
- Self-propelled Machinery (1);
- Non-self-propelled Machinery (5);
- Storage Structures (1);
- Outdoor Environment (1)

The practical exam will be graded on a pass/fail basis by the in-person instructor. The in-person instructor will assess the team's On-Farm Safety Review Tool booklet (preferred), or Excel spreadsheet, in which the mock review is recorded for accuracy, as well as observe the team during the mock review. Teams will interact with the in-person instructor during the mock review as if the instructor were the farmer or farm manager.

Program Assessment

Course evaluation may be assessed, separately for the online and in-person sessions, using the following set of questions with Likert scale responses (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree):

The Workshop Content:

- Was relevant to my needs.
- Was based on credible, up-to-date information.
- Was well organized.
- Was at the appropriate level.
- Overall, was excellent.

The Instructor:

- Was well prepared.
- Used teaching methods appropriate for the content/audience.
- Was knowledgeable of the subject matter.
- Managed the environment in a manner conducive to learning.
- Showed respect for all persons attending the program.
- Engaged the participants in learning.
- Related program content to practical situations.
- Answered questions clearly and accurately.
- Overall, was an excellent teacher.

Outcomes:

- The workshop objectives were achieved.
- I gained knowledge/skills/attitudes about the topics presented.
- I will use what I learned to enhance my professional responsibilities.
- I can use the knowledge and skills gained to impact my Extension or other professional colleague clientele.
- Overall, this workshop was excellent.
- I would recommend this workshop to others.

Open-ended questions may be added to the assessment for general comments.

Certified Safe Farm OSHA Relevancy Module

(8.17.16, Principal author Jim Carrabba)

Introduction

As most farms in the U.S. have had few employees, they have been relatively free from enforcement of OSHA regulations that aim to help promote the occupational health and safety of farm employees. However, the trend recently has been for larger farms that have more employees. This trend has resulted in farms coming under more scrutiny by OSHA. This module is to help the producer and the reviewer understand OSHA regulations, how the regulations pertain to farms, generally, and how to determine if a given farm is subject to OSHA enforcement. Additionally, this module will give the reviewer guidelines to assist the producer to be in compliance with OSHA health and safety standards.

How does this fit with the CSF Program?

The **basic** CSF program is not intended to assure that the review would prepare a farm to pass an OSHA inspection; rather it aims to reduce in a practical way, the risk of a farm-related injury or illness. This module is used as a **supplement** to the basic CSF review Program that is aimed mainly at small farms, so that it also applies to large farms that may come under OSHA scrutiny. This module aims to educate the producer on OSHA regulations and how they apply to their particular production agricultural operation, and to assist the producer to become compliant as may be required with OSHA health and safety standards.

Who is the intended audience?

The primary intended audience of this module is the CSF farm reviewer, as they need to understand the OSHA law as it pertains to farms, and how to assist the producer in understanding how their particular operation relates to the OSHA law. The secondary audience is the individual farm owner/operator, and/or the designated health and safety manager for the farm or ranch.

Who will administer it?

The regional CSF manager or facilitator in the local CSF program region will identify which operations requesting CSF services may come under OSHA enforcement. The reviewer(s) in the region will be the actual educator and reviewer for the OSHA module in a given area.

Program Details

History of this module's use

Although the basic CSF program has been in existence since 1996, there has not been an OSHA module. As the trend in agriculture has been toward larger farms with more employees, it is seen necessary that an OSHA module be developed to assist farms in understanding how OSHA applies to them, and to assist in their preparation if OSHA should approach the farm for inspection or enforcement of regulations.

Since about 2010, agricultural health and safety professionals in the states of Wisconsin and New York have been active in assisting farms to be prepared for OSHA compliance. Their experience has been used to assist in preparation of this module.

Goals of the module

- To assist producer and CSF staff (CSF Facilitator, CSF Reviewer, and CSF Wellness Clinician) in determining if a particular farming operation or task comes under State or

Federal OSHA enforcement criteria. This component includes a narrative, a table, and two accompanying flow diagrams to assist the CSF staff and producer in this determination.

- To provide a supplement to the basic CSF on-farm checklist to aid the reviewer in a) determining if a particular farm comes under OSHA criteria for enforcement and b) checking for specific hazards or other criteria related to OSHA regulations on that farm.

Preparation of staff/faculty presenting the program.

The reviewers administering this program must take and pass the Reviewer's Training Program. This program is described in the respective module in this procedures manual.

Description of the program

- This module consists of three components:
- A narrative
- Two flow charts
- The OSHA supplement to the basic CSF checklist
-

Narrative: CSF – OSHA Relevancy Module

This narrative is for the purpose of aiding the producer, and CSF staff, to understand the OSHA and how it applies to farms.

The Williams-Steiger² Occupational Safety and Health Act of 1970 requires, in part, that “every employer covered under the Act furnish to his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees. The Act also requires that employers comply with occupational safety and health standards promulgated under the Act, and that employees comply with standards, rules, regulations and orders issued under the Act which are applicable to their own actions and conduct” The Act created the Occupational Safety and Health Administration (OSHA), which sets and enforces protective workplace safety and health standards. OSHA also provides information, training, and assistance to workers and employers. The consultation branch of OSHA provides distance, or on-farm consultation assistance, upon request of the operator to identify and mitigate hazardous work exposures.

OSHA requires that **all employers (regardless of the number of employees)** have the responsibility of protecting their employees. However, because of **the small farm exemption clause**², (farms with 10 or less employees) OSHA regulations can only be enforced on approximately 10% of the 2.2 million farms in the U.S.

The Small Farm Exemption

A rider to the Appropriations Act (enacted in 1976) restricts the use of federal funds for enforcement of rules, regulations, standards or orders on small farms with less than 11 employees. A farming operation is exempt from OSHA enforcement activities and fines if it:

- Has had fewer than 11 employees, (not including immediate family members), at any time in the past 12 months (including part-time workers; i.e., one part-time worker equals one full-time worker).
- Table 1 summarizes the coverage of the small farm exemption. Figure 2 is a flow chart to help determine if a farm fits under the small farm exemption.

Please note that the small farm exemption is **voided** if the farm has a **temporary labor camp**, and for **activities and tasks that are not production agriculture**. Specifying in greater detail, the small farm exemption does not apply if the farm:

- Has had a temporary labor camp (providing housing for temporary employees) during the past 12 months. This applies even if the housing was only for just one person, and also even if that temporary employee is part time.
- Definition of a temporary labor camp housing for workers maintained by a farm includes housing:
 - As a required condition of employment; and
 - For a discrete, temporary period of time (i.e. for seasonal or temporary employment).
- The small farm exemption is also voided on operations, tasks, or activities on farms that are not primarily production agriculture. For example, if the **principle operation** of the farm is agricultural tourism or processing of agricultural products, that farm is **not exempt**. However, grain storage for later sale does not void the exemption. Also, if there is a mix of production and non-production activities occur on the farm (e.g. growing crops or livestock production, and processing and sale of food products, agricultural tourism, etc.) on the farm, the latter, **non-production agricultural components of the business are not exempt**.

Figure 3 provides a flow chart to determine OSHA coverage with operations that may have non-production activities ongoing on the farm.

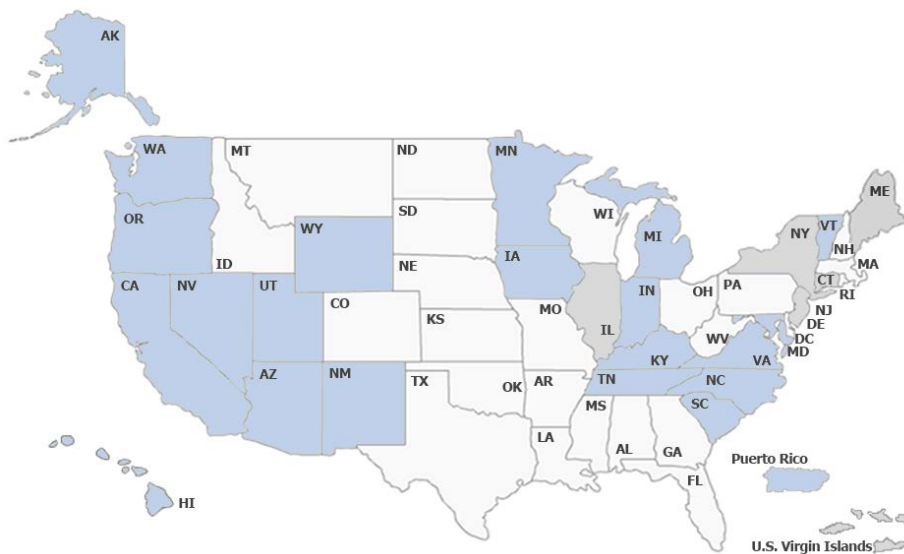
Note: Small farm employers still have the responsibility of protecting employees under OSHA regulations.

- Legally, the intent of OSHA regulations is to protect all farm employees, even though federal OSHA funds cannot be used to inspect or cite farms with 10 or fewer employees. However, farm **employers can be sued for negligence, in a civil court of law, and OSHA rules and regulations may be cited by the plaintiff to identify unsafe conditions on the farm.**
- There are three ways for states to comply with the OSHA as of October 2015. It is best to check with your own state Department of Labor to determine what the specific requirements are in your own state.
 - Individual states may elect to have their own state OSHA plan (State plan States) but these plans must be equal to or of greater protection for employees than specified in the Federal OSHA Act. These State plans must be approved by Federal OSHA.
 - If a state does not have a Federal OSHA-approved state plan, (see white colored states in Figure 1 below), or the state plan does not cover private employers (gray states in Figure 1 below), Federal OSHA will step in to conduct enforcement and inspections on farms not otherwise exempted under the small farm provision. This totals 27 states plus the territory of the Virgin Islands.
 - Twenty one states plus Puerto Rico (blue colored states in figure 1 below) have federally approved State OSHA plans that cover both private and public sectors. Mentioned above, State programs must meet or exceed the stringency of the federal program. Note most of these State-plan

States accept Federal funds to help operate their program, but they cannot use these federal funds to inspect or enforce to enforce OSHA regulations on small (less than 11 employees) farms.

- States plan states that **do not accept federal funds to operate OSHA regulations on farms**, and have regulations that apply to all farms, can enforce state OSHA regulations on farms with even one employee. States in this category include California, Washington and Oregon (with some limitations)

Figure1: OSHA Approved State Plans (As of October 2015)



Legend:

White = These States do not have State OSHA plans, and therefore Federal OSHA conducts OSHA regulations and enforcement.
Gray = These States have State Plans, but to not cover private firms (e.g. farms).
Blue = These State-plan States cover both Public and Private employers and firms.
CA, OR, WA = These States may not use federal funds to regulate farms, and therefore have boarder coverage of farms with less than 11 employees.

<https://www.osha.gov/workers/index.html>

OSHA as applied to large farms (11 or more employees)

There are four conditions on which OSHA may inspect and enforce regulations on large farms. These are listed in order of OSHA priority:

- Imminent danger to life or severe injury or illness situations
- Catastrophes and fatal accidents
- Complaints and referrals
- Programmed inspections (unannounced inspections)

OSHA has sections in the law that apply to agriculture (Agriculture standard titled; 29 CFR 1928). The 29 CFR stands for Title 29 Code of Federal regulations. Under 29 CFR 1928, there are six specific Agriculture Standards:

- 29 CFR 1928.51: Roll over protective structures (ROPS) for agricultural tractors – refers to 2 or 4 wheel drive or track vehicles of over 20 horsepower. This includes requirements for tractor safety training, ROPS use, and seatbelt use.
- 29 CFR 1928.52: Protective frames for wheel-type agricultural tractors (this standard is for the design and structure of the frame, not for its use).

- 29 CFR 1928.53: Protective enclosures for wheel-type agricultural tractors (this standard is for the design and structure of the frame, not for its use).
- 29 CFR 1928.57: Guarding of farm field equipment, farmstead equipment, and cotton gins
- 29 CFR 1928.110: Field Sanitation – refers to the provision of potable drinking water, hand washing and toilet facilities for hand labor workers.
- 29 CFR 1928.1027: Cadmium – refers to exposure to toxic metal fumes; some phosphate sources in fertilizer may contain cadmium.

The three 29 CFR 1928 Agricultural standards most likely to be cited are:

- 29 CFR 1928.51-Requirement for ROPS (Tractors newer than Oct. 25, 1976 that employees operate), tractor safety training for employees, and use of seatbelt requirements
- 29 CFR 1928.57-Guarding and shielding of agricultural machinery, shut down and servicing procedures, lockout of electrically powered farmstead of equipment, training requirements for operators of field and farmstead equipment
- 29 CFR 1928.110-Field Sanitation, applies to field workers performing hand work with crops

There are also seven General Industry (29 CFR 1910) standards that are ***directly applicable*** to agriculture:

- 29 CFR 1910.142: Temporary Labor Camps
- 29 CFR 1910.111: (a) and (b): Storage & Handling of Anhydrous Ammonia
- 29 CFR 1910.266: Logging Operations
- 29 CFR 1910.145: Slow Moving Vehicles (display of SMV signage).
- 29 CFR 1910.1201: DOT lighting and markings (tail lights, warning lights etc.)
- 29 CFR 1910.1200: Hazard Communication (training and access to information of materials that may cause harm).
- 29 CFR 1910.1027: Cadmium (welding, grinding, painting, fertilizer)

The four 29 CFR 1910 General Industry standards most likely to be cited on farms are:

- 29 CFR 1910.111: (a) and (b): Storage & Handling of Anhydrous Ammonia
- 29 CFR 1910.142: Temporary Labor Camps
- 29 CFR 1910.145: Slow Moving Vehicles
- 29 CFR 1910.1200: Hazard Communication

Safety and health hazards not covered by any of these specific regulations, could be cited under the General Duty Clause [Section 5\(a\)\(1\) of 29 CFR 1910](#).

The General Duty Clause states that the employer shall “furnish to each employee a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious harm”

Some possible examples of hazards that could be cited under the General Duty Clause could include and are not limited to; confined space hazards, respiratory hazards and lack of a respiratory protection program, lack of appropriate personal protection equipment, unabated noise hazards, or any hazard generally recognized by research publications, case record, or general knowledge.

Understanding all the OSHA regulations, terminology, and interpretations is complex and not an easy task. However, there are resources to help. A great source of information is the OSHA website or your regional OSHA office. The address for the website is: www.OSHA.gov. The OSHA website is a great resource to access for more information on the regulations. At the website, you can access the *Agriculture Operations Safety and Health Topics* page. From this page you can access the Agriculture standards and other useful agricultural safety and health information.

Table 1: OSHA Regulatory Activities Exempted under the Small Farm Exemption

OSHA's Appropriation Act Exemptions for Farming Operations OSHA Activity	Farming operations with 10 or fewer employees (EEs) and no TLC activity within 12 months.	Farming operations with more than 10 EEs or a farming operation with an active TLC within 12 months.
Programmed Safety Inspections	Not Permitted	Permitted
Programmed Health Inspections	Not Permitted	Permitted
Employee Complaint	Not Permitted	Permitted
Fatality and/or two or more Hospitalizations	Not Permitted	Permitted
Imminent Danger	Not Permitted	Permitted
11(c) (whistleblower investigation)	Not Permitted	Permitted
Consultation & Technical Assistance	Not Permitted	Permitted
Education & Training	Not Permitted	Permitted
Conduct Surveys & Studies	Not Permitted	Permitted

Please note that for those farms that do fall under OSHA regulation, there is an additional check list. This Checklist is to assist in the producer to be aware of likely hazards that an OSHA inspector would be looking for (**see Appendix SFR. 3**). It is not intended that a farm having mitigated these hazards would pass an OSHA inspection.

Flow Diagrams

Figure 2: Determining if **a farm** is exempt from OSHA enforcement according to the small farm exemption

(Credit to Carolyn Peterson)

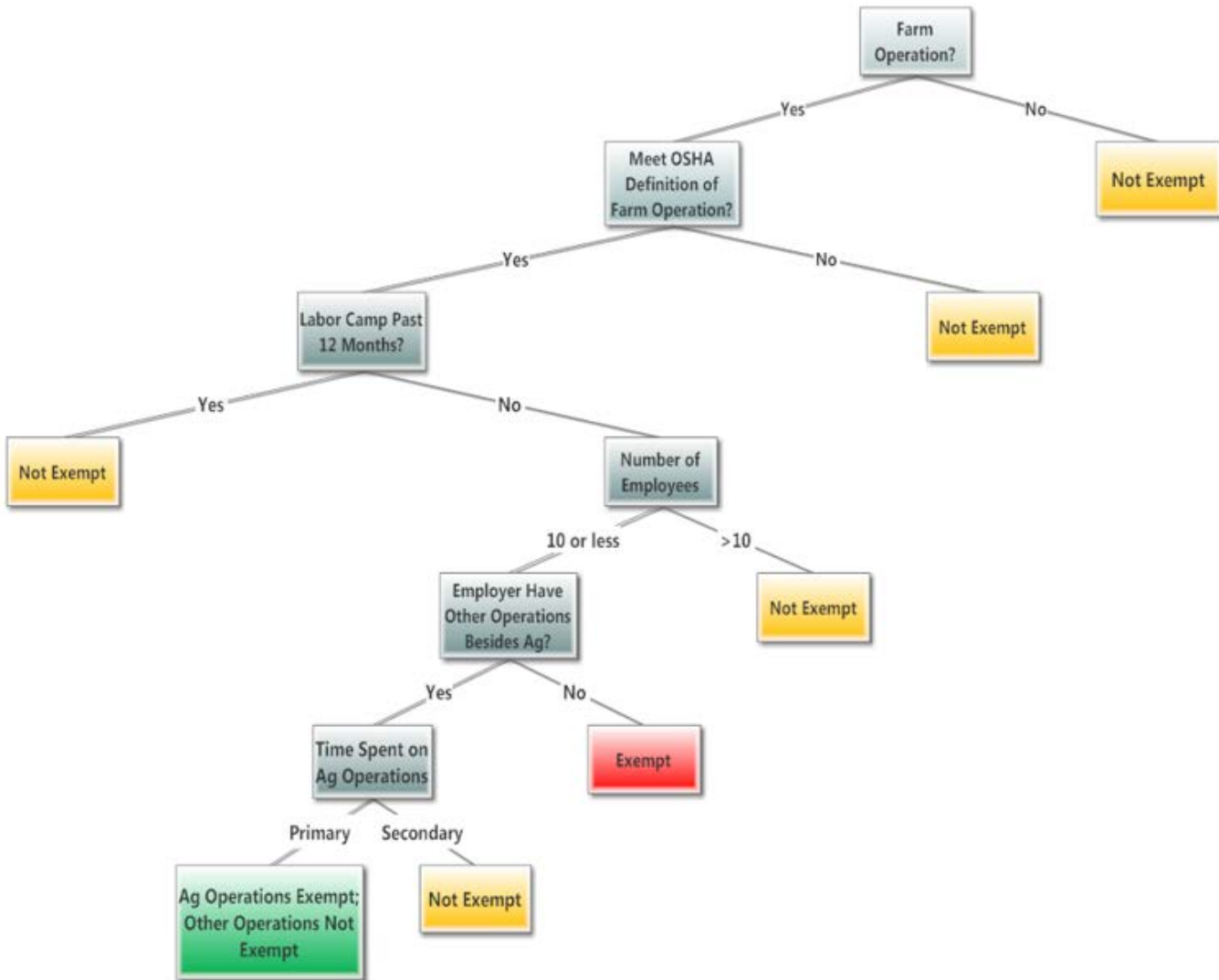
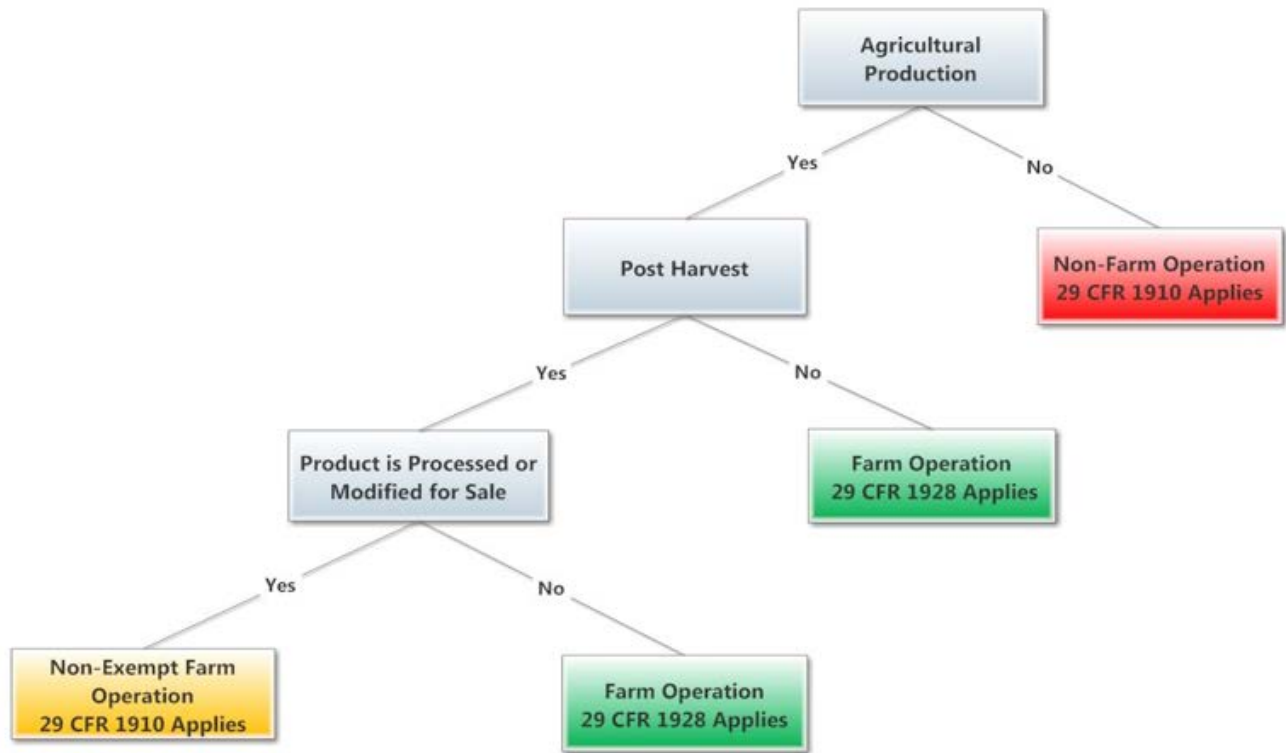


Figure 3: Determining if a **farm task** is exempt or non-exempt from OSHA enforcement



(Credit to Carolyn Peterson)

EPA Worker Protection Standard (WPS) Relevancy Module

(8.17.16 - Principal Author Robin Tutor)

The Environmental Protection Agency has promulgated regulations to protect migrant farm workers from the health hazards of pesticide exposures. This section is to help inform the applicability of these regulations, and facilitate the products on meeting the regulations as needed.

Introduction

Unlike OSHA which applies to a farm if it has had more than 11 employees, (not including immediate family members), at any time in the past 12 months (including part-time workers), the Worker Protection Standard (WPS) is intended to reduce the risks of illness or injury to workers and handlers resulting from occupational exposures to pesticides used in the production of agricultural plants on agricultural establishments regardless of their size. This module is to help the producer and reviewer understand WPS regulations, how the regulations pertain to farms, and how to determine if a given farm is subject to WPS enforcement. Additionally, this module will give the reviewer guidelines to assist the producer to be in compliance with WPS.

How does this fit with the CSF Program?

The **basic** CSF program is not intended to assure that the review would prepare a farm to pass a WPS inspection; rather it aims to reduce in a practical way, the risk of pesticide-related illness or injury. This module is used as a **supplement** to the basic CSF Program, aimed at any farm using pesticides. This module aims to educate the producer on WPS and how they apply to their particular production agricultural operation, and to assist the producer to become compliant as may be required by WPS.

Who is the intended audience?

The primary intended audience of this module is the CSF farm reviewer, as they need to understand the WPS as it pertains to farms, and how to assist the producer in understanding how their particular operation relates to WPS. The secondary audience is the individual farm owner/operator, and/or the designated health and safety manager for the farm or ranch.

Who will administer it?

The facilitator in the local CSF program region will identify which operations requesting CSF services may come under WPS enforcement. The reviewer(s) in the region will be the actual educator and reviewer for the WPS module in the given area.

Program Details

Although the basic CSF module has been in existence since 1996, there has not been a WPS module. As the WPS applies to over two million agricultural workers and their families working on farms, forests, nurseries, and greenhouses and using pesticides in the production of agricultural plants, it is seen necessary that a WPS module be developed to assist farms in understanding how WPS applies to them, and to assist in their preparation if their state's WPS enforcement agency should approach the farm for inspection or enforcement of regulations.

Goals of the module

- To assist producer and CSF staff (CSF Facilitator, CSF Reviewer, and CSF Wellness Clinician) in determining if a particular farming operation or task comes under WPS enforcement criteria.
- To provide a supplement to the basic CSF on-farm checklist to aid the reviewer in a) determining if a particular farm comes under WPS criteria for enforcement and b) checking for specific hazards or other criteria related to WPS on that farm.

Preparation of staff/faculty presenting the program

The reviewers administering this program must take and pass the Reviewer's Training Program. This program is described in the respective module in this procedures manual.

Description of the program

This module consists of:

- A narrative
- A WPS checklist with emphasis on respiratory protection, emergency eye wash and decontamination provisions will be added in 2017 once the EPA has released its revised WPS inspection checklist and How to Comply Guide.

Narrative: CSF-WPS Relevancy Module

This narrative is for the purpose of aiding the producer, and CSF staff, to understand the WPS and how it applies to farms.

Enacted in 1947, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) established a framework for the pre-market registration and regulation of pesticide products; since 1972, FIFRA has prohibited the registration of pesticide products that cause unreasonable adverse effects. FIFRA makes it unlawful to use a pesticide in a manner inconsistent with the labeling and gives EPA's Administrator authority to develop regulations to carry out the Act. FIFRA's legislative history indicates that Congress specifically intended for FIFRA to protect workers and other persons from occupational exposure directly to pesticides or to their residues.

Under FIFRA's authority, EPA has implemented measures to protect workers, handlers, other persons, and the environment from pesticide exposure in two primary ways. First, EPA includes specific use instructions and restrictions on individual pesticide product labeling. Since users must comply with directions for use and restrictions on a product's labeling, EPA uses the labeling to convey mandatory requirements for how the pesticide must be used to protect people and the environment from unreasonable adverse effects of pesticide exposure. Second, EPA enacted the WPS in 1992 to expand protections against the risks of agricultural pesticides without making individual product labeling longer and much more complex. The WPS is a uniform set of requirements for workers, handlers and their employers that are generally applicable to all agricultural pesticides and are incorporated onto agricultural pesticide labels by reference. Its requirements complement the product-specific labeling restrictions and are intended to minimize occupational exposures generally.

The WPS is a regulation primarily intended to reduce the risks of injury or illness resulting from agricultural workers' and handlers' use and contact with pesticides on farms, forests, nurseries and greenhouses. The rule primarily seeks to protect workers (those who perform hand-labor

tasks in pesticide-treated crops, such as harvesting, thinning, pruning) and handlers (those who mix, load and apply pesticides). **The rule does not cover persons working with livestock.**

EPA has revised the 1992 Agricultural Worker Protection Standard regulation to increase protection from pesticide exposure for agricultural workers and their families. In addition to changes in training frequency, minimum age requirements for pesticide handlers, mandatory posting requirements, no-entry application-exclusion zones, access to pesticide application records, record keeping and anti-retaliation provisions, changes in personal protective equipment will be consistent with OSHA standards for ensuring respirators are effective, including fit test, medical evaluation and training. **It should be noted that the OSHA standards adopted by the EPA relative to respiratory protection apply regardless of a farm's size if the operation is using pesticides** in the production of agricultural plants. Specific amounts of water to be used for routine washing, emergency eye flushing and other decontamination, including eye wash systems will also be required for handlers at pesticide mixing/loading sites. These changes will become effective January 2, 2017.

Understanding all WPS, terminology, and interpretations is complex and not an easy task. However, there are resources to help. A great resource of information is the Environmental Protection Agency's (EPA) website or your state's WPS enforcement agency. The address for the EPA website is <https://www.epa.gov/pesticide-worker-safety/revisions-worker-protection-standard>

Certified Safe Farms (CSF) Producer Education Component

(8.17.16, principal author Marcia Salzwedel)

Introduction

This is the occupational Health and Safety educational program for the producer, family members, and or the appointed or person(s) responsible for the health and safety of the farm family members and employees on that farm.

How does this fit with the CSF Program?

The Certified Safe Farm Program consists of three major components: 1) Education for the responsible person(s) for the health and safety of family members and employees on the farm, 2) Wellness and occupational health screening, and 3) On-farm safety review. This is the component for the education portion; the required education for the persons responsible for the occupational health and safety of those working on the farm.

Who is the intended audience?

This module is primarily intended for the owner/operator of the farm or the designated person(s) responsible for health and safety of employees. On a family operation, it is strongly recommended that if a spouse of the owner/operator is present, that person should also take the training. It is also strongly recommended that all children of the owner/operator(s) above age 14 take the training.

Who will administer it?

A "facilitator" will be assigned to the farm for administration of the training module. The facilitator will be the primary contact person for the farmer to guide them through the entire CSF process, including the training. More information on the facilitator is given below.

Program Details

History of this module's use

The primary training and education for the producer in the early versions of the CSF was conducted as a one-on-one reviewer and health professional component of the review process and the wellness screening process (see details of these educational efforts in the respective modules). These components are still required to be part of the CSF program. However, this is a new module included as a more formalized course to help assure a more complete and quality assured coverage of health and safety hazards and prevention that can be tailored to the specific farm.

Objectives of this Module

This module will provide education on the sources and prevention of major health and safety hazards on farms. It is meant to supplement the training that is provided to the producer during the review and wellness screening procedures. The training will be practical and tailored to the farming operation, with competency verified through assessments and activities.

Preparation of the Facilitator

A facilitator will be assigned to the farm for administration of the training module. The facilitator will be a person the farmer can work with to guide them through the training and the entire CSF process.

The training of the facilitator will include the basic Agricultural Health and Safety Course offered by the International Society for Agricultural Safety and Health (ISASH), or one of the Building Capacity Agricultural Health and Safety Core Courses. The ISASH course is presently being offered annually in June in conjunction with the ISASH annual conference. Building capacity courses in Agricultural Medicine are currently offered at the Universities of Iowa, Nebraska, Alabama, The Agromedicine Institute at East Carolina University, Texas Health Sciences Center at Tyler, and the Vermont Farm Health Task Force.

Who is the facilitator and what are their credentials?

- A person who has taken the ISASH or one of the Building Capacity Agricultural Health and Safety Core Courses
- It could be the clinical wellness person (i.e. AgriSafe nurse, PA etc.).
- It could be the CSF on farm reviewer for the region
- It could be the manager of his/her appointee from the regional CSF cooperating entity. Examples include those who are currently a component of the CSF consortium group (U.IA. (I-CASH), CS-CASH, Rural Health and Safety Clinic of Eastern Iowa, Farm Medicine Center, Penn State Extension, NYCAHM, one of the Insurance entities represented by Lee Hipp or Mike Keenan, NC State University, NC Agromedicine Institute
- It could be an extension person
- It could be an Insurance company representative.
- Future facilitator sources could come from potential CSF collaborators as we develop the CSF national program further (e.g. Extension, one of the NIOSH ag Centers, Non-profits such as ISASH, NECAS, AgriSafe, etc.
- If the facilitator is a reviewer, that person must have taken the CSF reviewer training course.

- Facilitator connects farmer to relevant resources to schedule clinic visits and on farm audits.
- Facilitator will need to document completion of educational component.

Description of the program

The program is available in two formats, online or in print, which allows for disparities in internet access, personal abilities, and learning style preferences. In the future, a third face-to-face format may be added. Materials will be made available on the National Agricultural Health and Safety Data Base (NASD) and maintained by NASD staff.

Information and safety strategies presented in this module are considered best practices for the industry, and are consistent with OSHA standards. Although there is flexibility for the producer to mitigate a hazard using their own methods (as long as they are effective) it is strongly recommended that all farms comply with these practices as a “best practices methods”, it is mandatory that farms subject to OSHA comply with them. To determine if your farm is subject to OSHA, please see the OSHA module (see section “Certified Safe Farm Relevancy Module”).

The framework of the program will include the following attributes:

- **Core topics:** as determined by the Agricultural Health and Safety Consensus committee of 2012¹ and required for all CSF producers.
- **Selected topics:** to allow for variation among farming operations, additional topics will be included based on commodities produced, worker population, family characteristics, and other farm characteristics. The goal is to tailor the education to specific characteristics of the farm operation.

Core Topics

- Introduction
 - General health/wellness of the farming population
 - Risk of illness or injury
 - Economics/cost of agricultural injuries and illnesses
 - Incentives for farm safety and wellness
 - Fit of this program in a risk management approach to the farming enterprise.
- Wellness principles
- Principles of injury prevention
- Traumatic Injury Prevention
 - Tractor overturns
 - Self-Propelled Equipment (combines, lawn mowers, etc.)
 - Non Self-Propelled Equipment & Tools
 - Augers & PTOs
 - Slips and Falls
 - Machine Shop & Buildings
 - Weather-Related
- Respiratory illnesses
 - Dusts
 - Gases
 - Anhydrous ammonia
 - Fumigants
 - Paraquat

- Skin diseases
 - Sun damage
 - Skin Cancer and Prevention
 - Contact dermatitis
- Musculoskeletal Diseases
 - Low back pain
 - Hand-Arm vibration syndrome
 - Repetitive motion injury
 - Arthritis
 - Ergonomics
- Noise, and noise induced hearing loss
- Thermal injury (contributing factors, symptoms and prevention)
 - Heat
 - Cold
- Psychosocial conditions (detection and prevention)
 - Stress
 - Depression

Topics for selection (select topics related to farm operation).

- Chemicals
 - Pesticides
 - Biocides and other chemicals
- Hired workers
 - Safety regulations for hired workers
 - Foreign born workers (migrant/immigrant)
- Women workers
- Children's health and safety
 - Working children
 - Nonworking children
- Elderly workers
- Animals (general)
 - Drugs and pharmaceuticals and needle sticks used in livestock production and veterinary treatment
 - Zoonoses
- Grain
 - Confined spaces
 - Gravity flow and forage wagons
- Beef & Dairy operations
- Swine operations
- Poultry operations
- Tobacco Production and flue curing barns
- Green houses
- Alternative Agriculture
 - Direct Marketing
 - Agritourism
 - CSAs
 - Organic Production

Generating the Educational Workbook

- On the NASD website, either the producer or the facilitator will enter information on the farm characteristics.
- The website will generate an “educational workbook” that includes the core topics and specific selected topics that match the farm characteristics.
- The materials/exercises in the educational workbook can be reviewed online by the farmer, and/or can be downloaded to produce a hard copy.

Documentation of learning (assessment)

- Goal is to determine if they have read/used/understood the materials
- Assessments should not be burdensome.
 - The goal will be to have an Interactive assessment
- Farmer can choose to do assessment in alternative formats and or a combination of methods
 - e.g. program using hard copy paper test with printed materials, or
 - Assessment online.
 - Verbal assessment with the reviewer, health professional or facilitator.
 - Completion of an exercises and creation of specific documents,
 - Example 1: Prepare a risk management plan for the farm based on the results of the farm audit.
 - Example 2: Prepare occupational health/ wellness goals for the family and workers (e.g. blood pressure, BMI, cholesterol, respiratory function, PPE use, first aid/CPR training goals
 - Example 3: Have an “unsafe scenario” written and ask how to “mitigate”. May have to be multiple choice options if online.
 - Example 4: Using a template that is provided, create an emergency response plan for your farm by “filling in the blanks”
 - Example 5: Develop a safety training plan (worker safety sessions/topics, frequency, materials to be used, refresher schedule, etc.)
 - Example 6: Show us a signature sheet which documents that your employees have been trained in safety

Extensiveness of training

- The goal is to make this process as simple, and as minimally burdensome as possible, yet retaining effectiveness and efficiency.
- Each topic area should take no more than 30 minutes to complete (with assessment).
- The total time for the core component will be aimed to take no longer than eight hours of time.
- Farms will be required to take all core and specialty topics that are relevant to their operation (guidance provided by the facilitator). The time for the “specialty component” training will vary depending on how many additional topics must be taken, but should not take more than 16 hours.

Evaluation

- Producer assessments will provide information on the learning outcomes.

- An evaluation is also done to assess the program process and outcomes. This will include a periodic assessment of injuries and illnesses on the farm, medical expenses, and risk mitigation and safety strategies that are implemented.

Certified Safe Farm Occupational Health and Wellness Screenings Component

(8.17.16 - Principal Authors Robin Tutor and Kelley Donham)

Introduction

This is the occupational health and wellness screenings program for the producer, family members and farm employees.

How does this fit with the CSF Program?

The Certified Safe Farm Program consists of three major components: 1) Education for the responsible person(s) for the health and safety of family members and employees on the farm, 2) Occupational health and wellness screening, and 3) On-farm safety review. This is the occupational health and wellness screening component.

Who is the intended audience?

The primary intended audience of this module is the CSF farm reviewer, as they need to understand the components and importance of an occupational health and wellness screening as well as the qualifications and training of clinical screening staff. The secondary audience is the individual farm owner/operator, and/or the designated health and safety manager for the farm or ranch.

Who will administer it?

The facilitator in the local CSF program region will identify an agricultural occupational health provider to conduct occupational health and wellness screening education for reviewers. Occupational health and wellness screenings for farms or ranches will be conducted by an agricultural health provider.

Program Details

Program history

In 1987, the Institute of Agricultural Medicine and Occupational Health of the University of Iowa-College of Medicine initiated a pilot project to deliver community-based comprehensive occupational services to farm families and agri-business in the state of Iowa. The project has expanded into a national network of agricultural occupational health and safety services known as the AgriSafe Network. In addition to AgriSafe Network affiliated sites, agricultural occupational health providers may be found in rural hospitals, clinics, health departments and university-affiliated state or federal agricultural occupational safety and health programs.

Goals of the module

- To provide the reviewer and the producer with an understanding of what agricultural occupational health and wellness screenings are recommended, why those screenings are important, how those screenings are conducted, who will conduct the screenings and where screenings can be conducted.

Preparation of staff/faculty presenting the program

The agricultural occupational health provider must have successfully completed a 40 hour agricultural occupational health and safety course approved by one of the University of Iowa Building Capacity Courses. Alternatively one could take the Agricultural Safety and Health Core Course provided by the International Society for Agricultural Safety and Health. This course is designed to give healthcare providers the knowledge and tools to identify, diagnose, and prevent health conditions in agricultural workers. The course is based on the textbook

Topics Covered in the Agricultural Occupational Health Core Course

- Rural health and agricultural medicine
- Veterinary pharmaceuticals, biologicals and antibiotics
- Agricultural toxicology
- Zoonotic diseases
- Agricultural skin diseases
- Cancer in the farm environment
- Agricultural trauma
- Agricultural respiratory illnesses
- Integration of agricultural occupational health care into an established health care organization
- Agricultural ergonomics/low back pain in the agricultural worker
- Easter Seals Rural Solutions
- Physiology and detection of occupational hearing impairment
- Skin cancer
- Behavioral health issues in the farming community
- Respiratory protection/fit testing

Completion of a National Institute of Occupational Safety and Health (NIOSH) approved spirometry course, training on OSHA respirator fit testing protocols, and certification as an occupational hearing conservationist by the Council for Accreditation in Occupational Hearing Conservation is also recommended.

Description of the program

This module consists of:

- A narrative
- A list of resources
- Appendix containing the following:
 - Appendix CS.1 - Occupational history Form

- Appendix CS.2 - Clinical screening Form
- Appendix CS. 3 - Health and Safety Goals Sheet
- Appendix CS.4 - CSF Personal Protective Equipment (PPE) Protocol
- Appendix CS.5 – Health Relationships to Heat and PPE use
- Appendix CS.6 – Personal Protective Mother Box Protocol
- Appendix FSR. 5 - Core Competencies of CSF Reviewers on Recognizing PPE Selection, Availability, Storage, and Use
- Appendix CS. 7 – PPE Education Flyer

CSF Clinical Screenings Component

Overview

Farmers all too often neglect going to the doctor unless it is absolutely necessary and CSF is one avenue for bringing this population into the preventive health care system. The CSF occupational health screening is aimed at preventing and/or identifying early the health conditions that affect agricultural workers. The screening is provided by a certified healthcare provider (usually a nurse). Screenings may take place at a clinic, on the farm or at another location mutually agreed upon by the farmer and the certified agricultural nurse.

Agriculture is consistently rated one of the most dangerous industries in the United States. The everyday work environment of agricultural workers includes many types of risks and exposures that can lead to adverse health conditions and many physicians are not aware of the inherent exposures and health conditions associated with agricultural workers. Similarly, health conditions can also impact the workers' ability to function safely in the farm environment. CSF provides a screening that can identify the occupational risks and recommend appropriate action such as using the appropriate personal protective equipment (PPE) or dust reduction methods. The wellness portion of the screening yields usual wellness goals such as lowering blood pressure, cholesterol, body mass index (BMI), etc. It is important for the physician, nurse, etc., who understand the farmer's work history and exposures to adequately diagnose and treat the injury or illness. Farmers report that they value the time and knowledge of the nurses and feel they receive a more thorough examination during the screening than they do at their family physician.

Prior to screening, individuals are asked to complete a thorough occupational history form that asks about their agricultural operation and the related exposures, past health conditions, and personal protective equipment use. Individuals then complete an occupational health screening and wellness screening paying particular attention to areas identified in the occupational history form. The results of each procedure are explained and individuals are educated on the results in relationship to their occupation based on; 1) information collected from talking to the farmer or rancher, 2) their occupational history form, and 3) on-farm review findings (if the review has been completed prior to the screening visit). Based on health screening results, referrals to see a physician or other specialist may be made. In addition, the nurse will work with the individual to set health and safety goals to measure progress in improving their health and safety. The nurse will follow-up with the farmer six to twelve months after the initial appointment to see if referrals and health goals were followed.

Occupational Health History

An occupational history form is mailed to the farmer or rancher to complete and bring to the

screening visit. The form is designed to gather input regarding work history, work exposures, and work habits. The nurse will review the occupational history form with the individual prior to beginning the screening process. This will allow the provider to assess occupational exposures and provide relevant education. This can help the farmer or rancher begin talking about work and their concerns while also helping the nurse to establish rapport with them. **(See Appendix CS.1 : Occupational history form)**

Examples of questions asked on the occupational history form:

- Agricultural chemical use and exposure
- Type of farming/livestock operation
- Exposure to loud noises
- Injuries and illnesses
- Family history of disease
- Medication use
- PPE use
- Stress/depression screens

Components and Justification for the Clinical Screening

- ✓ Skin cancer screening— Reports suggest that skin conditions are the most frequently reported type of agricultural illness. Due to the sun exposures of farmers, it is important to examine their skin carefully.
- ✓ Hearing— Farm equipment and livestock can exceed 85db. Farmers are exposed to these high exposures for long periods of time and it is important to test their hearing. Impaired hearing can also be a major contributor to injuries occurring.
- ✓ Vision— There are many instances where farmers are at risk for eye injury so their vision should be checked on a regular basis.
- ✓ Blood pressure— This is a major indicator of general wellness and should be checked often.
- ✓ Blood glucose.
- ✓ Pulmonary function test— Farmers are exposed to dust and gases frequently which can lead to acute and chronic respiratory conditions.
- ✓ Cholesterol— This is another indicator of general wellness and should be checked often.
- ✓ Height/Weight— This is important for determining a person's Body Mass Index (BMI) or ratio of weight to height.
- ✓ Back/spine assessment— Farmers frequently lift objects which can lead to back injury.
- ✓ PPE fitting and education— Farmers are at risk of exposure to many different chemicals, gases, and dusts so it is important to discuss the proper PPE and its benefits.
- ✓ A review of personal wellness issues- it is important to review and discuss personal wellness concerns and goals to stress the importance of general to wellness to their overall good health.
- ✓ Tetanus immunization, if necessary— Everyone should receive a Tetanus shot every ~7-10 years. As farmers work with aging buildings and machinery it is important to stay up – to-date on Tetanus shots.

- ✓ Cholinesterase, if necessary– If a farmer applies their own pesticides or chemicals it is important to conduct a cholinesterase test yearly (See Appendix Cholinesterase Algorithm)
- ✓ Stress/depression assessment– Farming can be a high stress occupation and it is important to discuss ways of coping with stress. Depression has a social stigma attached to it so it is important to discuss depression and make the farmer or rancher comfortable enough to discuss it.

Note: Screenings provided may vary by agricultural occupational health site. Check with nurse for specifics at their location.

(See Appendix CS.2 - Clinical Screening Form)

Occupational Health Screening Exam Policies

The occupational screening form will be used to record all information related to the screening. Any additional information that does not fit on the form should be recorded in visit notes.

The sequence of the occupational screening will be determined by the specifics of each individual screening site: physical layout, time limitations, etc. The progression of the visit should strive to promote developing rapport and trust while also effectively using time. An example of the exam sequence follows:

- Check in
- Explain purpose of screening visit
- Complete Treatment Consent and Information Release Form
- Complete Release of Information for individual's primary care physician
- Height/weight; calculate BMI
- Blood pressure-sitting and standing
- Spirometry (lung function)
- Vision screening (Snellen Eye Chart or Titmus Vision Screener)
- Skin assessment
- Audiology (hearing screening)
- Cholesterol
- Blood glucose
- Musculoskeletal Exam
- General health review
- Health and Safety Goals Sheet
- Review of results
- Referral needs explained
- Personal protective equipment
- Follow-up letter to physician
- Data entry

(See Standing Orders for screening parameters and when to educate and/or refer for follow-up regarding an abnormal screening result)

Health Goals Sheet

Health Goal Sheet

After the testing portion of the screening, the nurse discusses the results with the farmer or rancher. The nurse uses the 2 page Health and Safety Goals (HSG) sheet to discuss the test results. The result of each test is recorded on the HSG sheet along with the provider's follow-up recommendations. The provider discusses the results with the farmer or rancher in context of their operation such as poor pulmonary function results for a pork producer. This is an opportunity for the nurse to answer questions and educate the farmer. If a concern is noted, the nurse can either refer the individual to a physician or recommend that the condition is monitored and mentioned at their next primary care provider appointment. The farmer or rancher is encouraged to show their copy of the HSG sheet to their primary care provider and discuss their results. The individual is asked to develop three health goals for the next 12 months such as eating better, exercising more, or lower BMI.

Examples of health goals include:

- Lose 10 pounds
- Lower cholesterol
- Lower blood pressure
- Eat a better diet
- Exercise more

Safety Goal Sheet

After discussing their health results and goals, the nurse will review their recommendations and PPE, as well as develop 3 safety goals for the next 12 months. The nurse will develop a "PPE Prescription" which outlines the type of PPE to be worn based on their specific exposures. A copy of this PPE Prescription form should be contained in the PPE storage container on the farm, along with ordering information for replacement of PPE. The nurse may recommend different types of respirators based on dust exposures or chemical exposures, or recommend Tyvek clothing for pesticide applicators. The Safety Goals has a space for the nurse to record their recommendations for all areas of PPE use such as hearing, respiratory, vision, skin, etc. **(See Appendix CS.3: Health and Safety Goals Sheet)**. A copy of the Safety Goals Sheet and PPE Prescription should be sent to the farm reviewer (if the review has not yet occurred) so they are able to check that the appropriate PPE is available and in usable condition on the farm.

Examples of safety goals could include:

- Use respirator when necessary
- Wear ear plugs while using loud equipment
- Use sunscreen more often
- Improve structural integrity of old buildings on farm
- Create a safe play area for children

Referrals to Other Health Professionals

CSF is a preventive (not a curative) healthcare service provided to the agricultural community and as such when a health condition is identified during the screening the nurse will refer the individual to his or her primary care provider. If they do not have a primary care provider, then the nurse will assist them to identify options for care in their area. CSF is an opportunity to have this population served by healthcare providers. This is important as farmers and ranchers are reluctant to visit healthcare providers due to the cost, fear of finding something wrong, or the inability to leave work. CSF is a good opportunity to serve an at risk population and identify and treat conditions early.

The nurse will write a referral letter to the primary care provider or, if desired, the nurse will make a follow-up call to see if the referral was followed through and if action has been taken on the health and safety goals. Developing specific health and safety goals, follow-up communication, encouragement and facilitation of goal achievement is critical. If the farmer or rancher did not see a physician, the nurse will discuss the risks associated with the identified condition. The nurse should encourage the individual to see a physician and to follow through with their health and safety goals.

Health and Safety Education

Education is entwined throughout the CSF experience. Personalized education based on their particular operations and its inherent exposures and risks are provided during the screening and the farm review. During the occupational health screening the nurse provides education on health risks from hazards found on the individual's farm, based on the their occupational history form and additional oral occupational history anamnesis. CSF is an educational experience which enables the farmer or rancher to identify hazards and consciously choose to remove or avoid the hazards. Yearly educational meetings are held and quarterly newsletters are mailed. The quarterly newsletter includes a special insert on timely health and safety tips. PPE education has proven to be effective within the CSF program. Participating farmers report an increased use of PPE because they are educated on the connection between exposures and their health. The participants are educated on not only proper PPE use but keeping new/clean PPE available to use at all times and to keep PPE near areas where it will be used. Information will be provided on where to purchase appropriate PPE. **(See Appendix CS.4, CSF PPE Protocol, Appendix CS. 7: PPE Information Sheet, Appendix FSR 5: Core Competencies of CSF Auditors on Recognizing PPE Use, and Appendix CS.6 [The Mother Box Program]).**

Note: PPE recommended according to guidelines. A PPE Prescription will be provided by the nurse based on the reported occupational exposures. Medical limitations to PPE use will be noted. Proper storage techniques and how to obtain additional PPE will be provided by on-farm safety reviewers.

For farmers or ranchers working in high heat environments, it is also important to emphasize the importance of their ensuring that health conditions such as high blood pressure, respiratory conditions, and diabetes are under control when using personal protective equipment (PPE). They should understand that although PPE is meant to prevent exposures, that it will also make

them hotter and put additional stress on the heart and lungs. **(See Appendix CS.5: Health and its Relationship to Heat & PPE Use).**

Periodic Follow-up

Follow-up calls are made to farmers or ranchers approximately six to twelve months after their initial appointment to assess their progress in achieving their health and safety goals. During this call, the nurse will inquire about the farmer or rancher's health conditions and if they followed through on referrals to their primary care providers or a specialist. If a referral has not been followed by the farmer, the nurse will reiterate the importance of seeing a physician about the condition. The nurse will ask if PPE is being used and if it is the appropriate kind. They will also ask if the safety goals have been acted on. The nurse will encourage and facilitate the individual's achievement of referrals and health and safety goals.

Communication with On-farm Safety Reviewer

The nurse will be the local manager of the program and will disseminate program information to the farm reviewer and should maintain regular communication. It is important that the nurse and the farm safety reviewer frequently communicate about their farmers and ranchers in regards to specific concerns either one has. If the nurse is concerned about certain exposures they can communicate this to the reviewer. The nurse should communicate what the proper PPE for the farmer is, so the reviewer can ensure the farmer is using the right PPE. The nurse should send the reviewer the safety goals sheet before the farm review occurs. Then when the reviewer conducts the review they can look for the exposure and ask the farmer about appropriate PPE availability and accessibility. If the reviewer notices an area which may pose a health concern the reviewer should communicate this with the nurse. **(See Appendix FSR. 6: Farm Reviewer Communication Plan)**

Clinical Visit Checklist

- Recruit farmer or rancher and schedule appointment
- Send occupational history form
- Review occupational history form prior to screening
- Conduct screening
 - Skin cancer screening
 - Hearing
 - Vision
 - Blood pressure
 - Pulmonary function test (PFT) or spirometry
 - Cholesterol
 - Blood glucose
 - Height/Weight
 - Back/spine assessment
 - PPE fitting and education
 - A review of personal wellness issues
 - Tetanus immunization, if necessary
 - Cholinesterase, if necessary
 - Stress/depression assessment
- Prepare Health and Safety Goals sheet. Discuss results with farmer or rancher. Prepare PPE prescription
- Provide education. Answer any questions the individual may have
- Discuss referrals

- Provide CSF binder with the following information:
 - On-farm safety review tool summary sheets
 - A copy of the Health and Safety Goals Sheet
 - An on-farm corrective actions sheet
 - Educational materials from occupational health screening
 - PPE storage and upkeep information sheet
- Discuss farm or ranch operation with farm reviewer, if review has not yet occurred. Give a copy of the Safety Goals sheet to reviewer for discussion during farm review
- Follow-up with farmer or rancher six to twelve months later

****** This checklist should be used as a guideline when conducting the occupational health screening.**

Quality Assurance for Screening Visit

1. Quarterly review of selected screening forms including: occupational history form, clinical screening form, and Health and Safety Goals Sheet.
2. The nurse will review occupational history form with farmer or rancher and complete missing items at each visit.
3. Completion of visit follow-up calls tracked monthly.

Resources

- AgriSafe Network www.agrisafe.org
- NIOSH Spirometry training <http://www.cdc.gov/niosh/topics/spirometry/training.html>
- Council for Accreditation in Occupational Hearing Conservation <http://www.caohc.org/>
- Respirator medical clearance and fit testing requirements (Note: all requirements apply if subject to OSHA, only medical clearance, fit testing procedures and training requirements apply if subject only to WPS. Medical clearance, fit testing procedures and training requirements are appropriate for any individual using respiratory protection). https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=12716
- Donham KJ, Thelin, A, *Agricultural Medicine: Rural Occupational Health, Safety, and Prevention*, Blackwell Publishing, 2nd edition, 2016.

National Agricultural Safety Data Base Web Management Tool



A Web-Based CSF Management System

Draft, July 26, 2016, Jeff Nelson, Conceptual Arts.
KJD Edits July 27, 2016

In the national CSF system as proposed, there are various participant classes. As these entities will operate relatively independently in different regions, overall system communication and data management are essential. A web-based management system could be used to coordinate many of the activities needed to make the system work.

The participant classes involved in the CSF system include:

- **Potential Clients - Producers/Owner-operator/Farm Managers** –
 - Those interested in learning about CSF certification,
- **CSF Clients - Producers/Owner-operator/Farm Managers** – **who have registered for CSF certification**
 - Education Portal – CSF clients who are taking the required health and safety education program.
 - CSF status portal – e.g. Farm Safety scores, deficiencies remaining, health and wellness reports, requirements remaining to reach CSF status.
- **CSF Administrators**
 - persons charged with overseeing the management of the program
 - National program manager
 - National program coordination
 - Recruitment and retention of supporting nationally of insurances, agribusinesses, and farm groups
 - Local/regional CSF F facilitator/manager
 - Managing and coordinating CSF activities in their region
 - Recruitment and retention of regional farmers and supporting insurances, agribusinesses, and farm groups

- Steering/facilitating the producer through the education and certification process
- **On Farm Safety and Health Reviewers** –
 - ag safety professionals assigned to producers that are charged with conducting on-site assessments of the producer’s operation
 - The training program and materials for the CSF on farm reviewers
- **Health Screeners** – health professionals charged with conducting a structured health screening of the producers
- **Underwriting Agencies** – Insurance companies, Agribusinesses, Farm and Commodity groups seeking verification of CSF certification

The CSF management will include various interfaces designed to support each of these participant classes. A brief description of the core function of these various interfaces is included below.

Because the CSF system may collect proprietary information about individual producer operations, and/or the results of individual health screenings, the system **will be built with the appropriate level of security.**

The basic process of earning certification is:

1. The Producer learns about CSF (the benefits, the process)
2. The Producer becomes a Client by completing an online registration form
3. The facilitator (local administrator) assigns a Reviewer to the Client
4. The facilitator assigns a Health Screener to the Client
 - a. An initial audit is conducted (in person, via phone or online) to assess the nature of the Client’s agricultural operations. The information is used to determine [a] the relevant components of for the Client’s educational curriculum, [b] the relevant components of the assessment to determine the Client’s health and safety knowledge relevant to their operation, and [c] the relevant components for the Reviewer’s onsite review of the Client’s operation (e.g. are children involved, women worker issues, hired worker issues, OSHA or EPA relevancy).
5. The educational curriculum is delivered to the Client (via the website, or on site classroom format)
6. The Client studies the educational curriculum
7. The Client achieves a passing score on the educational assessment
8. The Client undergoes a health assessment
9. The Reviewer (who has taken and passed the reviewer educational program) conducts an on-site audit

The process is event-driven. The CSF management will include various interfaces designed to support the various participant classes. A brief description of the core function of these various interfaces is included below. The screen mock-ups included show how those functions might appear within the interface. The screen mock-ups were intentionally designed to emphasize actions needed to be performed by the user in this event-driven system. Only the top-tier

screen mock-ups are included – it is hoped that these core screens can provide a sense of how the system will operate.

Because the CSF system may collect proprietary information about individual producer operations, and/or the results of individual health screenings, the system will need to be **built with the appropriate level of security.**

Producer (Pre-Registration) Interface

The producer home page is used by farm operators. The function of the page is to:

- Describe the CSF program and its benefits ([a] lower insurance costs, [b] keep producer, producer’s employees, producer’s family safe, and [c] consumers prefer “responsibly produced” products)
- Describe the process for getting CSF certified
- Encourage the user to sign-up, and
- Have the user complete an online form in order to get registered (name, address, contact information, contact preferences, and basic questions about the producer’s operation).



- What is Certified Safe Farm?
- Why get certified?
- What’s the process?
- Search for Certified Operations
- Sign me up!

Client (Post-Registration) Interface


The focus of the Client Interface should be helping the Client navigate the process of earning certification. It should track the process, and should give the Client a visual give the Client a visual representation of his/her progress.

The “Access” button next to the “Educational Curriculum” takes the Client to the collection of educational materials. All materials can be accessed online.

The “Take Exam” button next to the “Education Assessment” takes the Client to an online exam.

The Client can only access the information related to his/her certification process.

logged in as: joeclient@smithfarms.com
[log out](#)



Client Dashboard

[Account settings](#)
[CSF Client Guide](#)

Certification Progress

Registration:	Completed	
Reviewer Assigned:	David Davidson	Contact
Health Screener Assigned:	Paula Paulson	Contact
Initial Audit:	Completed	
Educational Curriculum:	Finalized >>>>>>	Access
Education Assessment:	Pending >>>>>>	Take Exam
Health Screening:	Completed >>>>>	See Results
On-Site Review:	Appointment scheduled 09/26/16, 9:00a	

[Search Database of Participating CSF Underwriters](#)

Reviewer Interface


The administrator initiates assignment requests to specific Reviewers. The Reviewer needs to either accept or decline those requests.

Once an assignment is accepted, there is a defined set of activities that Reviewer will perform.

- Conduct an initial audit to assess the nature of the Client’s agricultural operations
- Use the information from the initial audit to determine [a] the relevant components of for the Client’s educational curriculum, [b] the relevant components of the exam used to assess the Client’s knowledge, and [c] the relevant components for the Reviewer’s onsite review of the Client’s operation
- Conducts an on-site audit of the Client’s operation

The interface should be designed around completing these core functions. Reviewers can only access the information for the Clients to which they have accepted an assignment.

logged in as: jackreviewer@ashpro.org
log out



Reviewer Dashboard

My status: active
[Account settings](#)
[CSF Reviewer Guide](#)

Assignment Requests

<u>Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>			
06/23/16	Smithville Dairy	Petaluma, CA	Jane Doe	details	Accept	Decline
06/25/16	Oscars Orchards	Davis, CA	Aaron Able	details	Accept	Decline
07/02/16	Val's Vineyards	Healdsburg, CA	Barry Borden	details	Accept	Decline

Action Needed

<u>Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>	<u>Action Needed</u>
06/24/16	Jones Family Farm	Gilroy, CA	Carl Carlson	details Schedule Initial Audit
06/26/16	Victor's Veggies	Stockton, CA	Don Donaldson	details Finalize Ed Curriculum
07/03/16	Paul's Poultry	Healdsburg, CA	Eric Ericson	details Schedule On-Site Review

Scheduled Appoinments

<u>Appt Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>	<u>Launch Tool</u>
07/13/16	Gordon Groves	Davis, CA	Gordy Gordonson	details 10:00a Initial Audit
07/26/16	Dee's Dairy	Mill Valley, CA	John Johnson	details 4:00p On-Site Review

Current Clients

<u>Start Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>	<u>Most Recent Activity</u>
11/13/15	Beefeater Ranch	Manteca, CA	Fred Foster	details Health Screening Appt Set
03/24/16	Central Valley Nuts	Stockton, CA	Kirk Kirkland	details Edu Curriculum Finalized
12/07/15	Dee's Dairy	Mill Valley, CA	John Johnson	details On-Site Review Completed
05/01/16	Jones Family Farm	Gilroy, CA	Carl Carlson	details Assessment Exam Passed
01/02/16	Paul's Poultry	Healdsburg, CA	Eric Ericson	details Health Screening Complete
04/09/16	Victor's Veggies	Stockton, CA	Don Donaldson	details Initial Audit Completed

[All Clients](#)

Health Screener Interface

The administrator initiates assignment requests to specific Health Screeners. The Screener needs to either accept or decline those requests.

Once an assignment is accepted, the Screener will need to contact the Client in order to schedule an appointment for conducting the health screening, and then later, actually conduct the health screening.

logged in as: annscreeener@ashpro.org

[log out](#)



Health Screener Dashboard

My status: active
[Account settings](#)
[CSF Screener Guide](#)

Assignment Requests

<u>Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>			
06/23/16	Smithville Dairy	Petaluma, CA	Jane Doe	details	Accept	Decline
06/25/16	Oscars Orchards	Davis, CA	Aaron Able	details	Accept	Decline
07/02/16	Val's Vineyards	Healdsburg, CA	Barry Borden	details	Accept	Decline

Current Clients

<u>Assnt Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>		<u>Action Needed</u>
06/24/16	Jones Family Farm	Gilroy, CA	Carl Carlson	details	Schedule Screening Appt
06/26/16	Victor's Veggies	Stockton, CA	Don Donaldson	details	09/12/16, 10:30a Screening Data
07/03/16	Paul's Poultry	Healdsburg, CA	Eric Ericson	details	Schedule Screening Appt
07/03/16	Beefeater Ranch	Manteca, CA	Fred Foster	details	10/09/16, 2:30p Screening Data

Recent Clients

<u>Scrn Date</u>	<u>Name of Operation</u>	<u>Location</u>	<u>Contact Name</u>	
11/13/15	Beefeater Ranch	Manteca, CA	Fred Foster	details
03/24/16	Central Valley Nuts	Stockton, CA	Kirk Kirkland	details
12/07/15	Dee's Dairy	Mill Valley, CA	John Johnson	details
05/01/16	Jones Family Farm	Gilroy, CA	Carl Carlson	details
05/13/16	Gordon Groves	Davis, CA	Gordy Gordonson	details
01/02/16	Paul's Poultry	Healdsburg, CA	Eric Ericson	details
04/09/16	Victor's Veggies	Stockton, CA	Don Donaldson	details

[All Clients](#)

Administrator Interface

When a client has successfully registered for the CSF Certification program, the Administrator needs to assign that client a Health Screener and a Reviewer. Beyond that, there is no other day-to-day activities the administrator needs to perform. Included on this screen design is an area where the administrator can monitor recent activity.



Certified Safe Farm

Administrator Dashboard

logged in as: sallyadmin@ashpro.org

[log out](#)

[Account settings](#)
[CSF Admin Guide](#)

Action Needed

Date	Name of Operation	Location	Contact Name		Action Needed
06/24/16	Jones Family Farm	Gilroy, CA	Carl Carlson	details	Assign Health Screener
06/26/16	Victor's Veggies	Stockton, CA	Don Donaldson	details	Assign Reviewer
07/03/16	Beefeater Ranch	Manteca, CA	Fred Foster	details	Assign Reviewer

Recent Activity

StrtDate	Name of Operation	Location	Contact Name		Activity Description
11/13/15	Beefeater Ranch	Manteca, CA	Fred Foster	details	Health Screening Appt Set
03/24/16	Central Valley Nuts	Stockton, CA	Kirk Kirkland	details	Edu Curriculum Finalized
12/07/15	Dee's Dairy	Mill Valley, CA	John Johnson	details	On-Site Review Completed
05/01/16	Jones Family Farm	Gilroy, CA	Carl Carlson	details	Certification Completed
05/13/16	Gordon Groves	Davis, CA	Gordy Gordonson	details	Assessment Exam Passed
01/02/16	Paul's Poultry	Healdsburg, CA	Eric Ericson	details	Initial Audit Completed
04/09/16	Victor's Veggies	Stockton, CA	Don Donaldson	details	Health Screening Complete

Access CSF Databases

- [Current Clients](#)
- [All Clients](#)
- [Reviewers](#)
- [Health Screeners](#)
- [Underwriters](#)

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APPENDICES

(kjd edits 8.17.16)

Appendix: CSF Coalition Consensus Committee Protocols (CC)

Tab number 10. CC.1 National Consensus Protocols

Frequency of services

Certification of level of services

Trademark of the CSF Program, logo, and signage of notification of certification

Credentials and Training Requirements for CSF Health Care Professionals and on Farm Reviewers

Appendices: CSF Farm Safety Review Components (FSR)

Tab number 11. FSR.1 = Preparing for the Farm Safety Review

Tab number 12. FSR.2 = Basic Farm Safety Review Check List Results Summary

Tab number 13. FSR.3 = OSHA Relevancy Check list

Tab number 14. FSR.4 = Corrective Action Sheet

Tab number 15. FSR 5 = CSF PPE Core Competencies for Reviewers to Recognize Proper Selection, Availability, Storage, and Use.

FSF 6 = Communication Responsibilities Between review and CSF Clinician

Appendices: CSF Occupational Health and Wellness Clinical Screening (CS)

Tab number 16. CS.1 = Occupational History Form

Tab number 17. CS.2 = Clinical Screening Form

Tab number 18. CS.3 = Client Health and Safety Goals

Tab number 19. CS.4 = Personal Protective Equipment Guide Protocol

Tab number 20. CS.5 = Health Relationships to Heat and PPE Use

Tab number 21. CS.6 = Personal Protective Mother Box Protocol

Tab number 22. CS.7 = PPE Client Education Flyer

Appendix: CSF Coalition Consensus Committee Protocols

CSF Consensus Protocols

(January 27, 2016)

The following are protocol components vetted by the National CSF Consensus Consortium. These procedures are to be followed in all locations where the CSF program is in operations. These components are to be included in the Procedures manual, and include how frequent the various services should be offered, progressive levels of certification, and guidelines for the certification certificate, and the driveway sign that is to be posted in a prominent place for certified farms.

Frequency of services

Considerations: Provision of services requires time and resources from the onsite safety and health consultant and the health care provider as well as the producer. Also, consistent contact with health and safety activities helps to assure the prevention occurs and is sustainable. Further, Equipment and hazards change on a farm over time, and a given farm may have new hazards not present in an earlier observation. We aim to strike a balance between effectiveness of the program to reduce health and safety hazards, cost efficiency, and availability of resources. Therefore, the frequency of services for the three basic components is to occur over a five-year cycle. Although prior research and practice indicates that providing the health screening first helps to motivate and achieve greater commitment of the producer, the actual order of the components may be offered according to availability of resources and convenience to the organization providing the services.

The services should be offered over a 5 year cycle. (The year the specific services are offered may vary depending on resources at the time). The farm must re-certify each component within 5 years of the previous certification. The following is a recommended schedule:

- Year 1 – Clinical health screening component
- Year 2 – Education component
- Year 3 – On farm safety review
- Year 4 – quarterly updates on health and safety information
- Year 5 – Quarterly Updates on health and Safety
- Year 6 – Start cycle again.

Certification of level of services

Considerations: Recognition of goal achievement is critical to enhancement of change. Further, it offers performance indicators for insurance companies and other agribusinesses to offer incentives.

The goal of CSF is to have farms certified in all three components (clinical screening for occupational and general wellness, health and safety education, and farm safety review). However, certificates in all three levels may not be economically feasible for all farms, and passing all three levels may take time. Therefore, recognition is provided for partial completion. The level(s) of certification will be notified on the certificate and on the driveway sign according to the number of the three components accomplished - as follows:

- One component – Bronze level,
- Two components – Silver Level,
- All three components – Gold level.

The amount of possible incentives (from insurances, dairy cooperatives etc.) would be proportional to level of accomplishment, eg. level 1 = 3%, level 2 = 6%, Level 3 = 10% savings/incentives on sales and services.

NOTE that the percent of savings of sales and services above at each level is only a suggestion. It is up to what is negotiated with the provider of the insurance or agribusiness.

CSF Program and Form of CSF logo, driveway sign, and certificate

- The CSF Program in whole is trademarked by the University of Iowa.
- The logo and name, "Certified Safe Farm," are also trademarked by the University of Iowa.
- Sponsoring agency, logo etc. may be added to the bottom of CSF logo (as N. Carolina has done). Also, a sticker (like the year on your car license plates) designating the level of certification needs to be added (Bronze, silver or gold), and the year through which the certification is valid.
- The logo, certificate, and driveway sign are available to participating sites for download from the CSF Portal on the NASD web site.



Credentials and training requirements for Health care professional to conduct the CSF AgriSafe health screenings, and the Auditor credentials

Considerations: It is important that the health care providers who offer the health screening and on-farm safety consultants have documented training that informs them of the farm health and safety hazards, risks, and prevention. This documentation of training by certificate is important for quality assurance of the services and for recognition of qualified persons by the supporting agribusinesses. This same training is recommended for the on-farm safety reviewers but not required, as there is other specified training provided in this document for these professionals (see heading “Farm Safety Reviewer Qualifications and Training”). This core course is defined by the 30 member consensus core process as published in the following article (Rudolphi and Donham. Toward a National Core Course in Agricultural Medicine and Curriculum in Agricultural Safety and Health: The “Building Capacity” Consensus Process. J Agromedicine (20) 1, 2015.

- The Agricultural Medicine core course as offered by one of the U.I. Building Capacity sites, including the University of Nebraska, University of Iowa, The Vermont Farm Health Task Force, The North Carolina Aeromedicine Institute, The University of Alabama, The University of Texas at Tyler, and the International Society of Agricultural Safety and Health, Agricultural Health and Safety Core Course.

Appendix CSF.1. Preparing for the Farm Safety Review

PREPARING FOR THE FARM SAFETY REVIEW

(8.17.16)

(The following information is to be presented to prospective and new CSF clients. It may be presented orally by CSF staff, provided in hard copy, and available on line at the CSF NASD web site portal)

Thank you for joining the Certified Safe Farm (CSF) program.

As a CSF participant, you will receive an on-farm safety review. It will be done by a local farm safety consultant who has been trained to assess farm hazards. The review covers machinery, buildings, and work environments, using a standard checklist. In order to pass the review and become certified, your farm must score an 85% or higher. In the future, your status as a Certified Safe Farmer may allow you to receive agribusiness and insurance discounts. You will receive economic incentives after you become certified.

Although the goal of the CSF program is to reduce the risk of farm illnesses and injuries, we recognize that all farm-related illnesses and injuries may not be eliminated. Please keep in mind that:

- The CSF farm safety checklist is research-based covering typical hazards, but is not an exhaustive list of all potential hazards.
- It is not possible for the farm safety reviewer to observe all potential hazards in the limited amount of time that they spend on your farm.
- The review provides a snapshot of conditions at one point in time, and conditions will change over time. Unpredictable weather and animals, breakdown of equipment, and other conditions can create hazardous situations even on the safest farms.

Although all injuries and illnesses cannot be eliminated, we are confident that it is worth your time and effort to make improvements and eliminate hazards. If the program is followed as designed, prior research on nearly 1000 CSF farms has revealed a reduction in illnesses, serious injuries, and a 47% reduction in medical care costs compared to non-CSF farms. These improvements will reduce may prevent injuries, illnesses, and deaths on your farm. Your active participation and commitment to safety will pay off by keeping you, your family, workers, and visitors safer on your farm.

You can increase your likelihood of passing the farm safety review by preparing in advance of the farm visit. Consider making as many safety improvements on your farm as you can, prior to the time the CSF reviewer comes to your farm. The following list includes some items included in the CSF checklist. These items can be used as a guide for making improvements. When you make changes on your farm, record them on the following list. Please identify which machine, building, or environment was improved. The safety reviewer will ask you for this completed form when he/she makes his/her first visit to your farm.

MACHINERY checklist items include (as applicable):

- Operator station is clear of obstacles (chains, cans, etc.)
- Access has adequate steps and handrails
- Steering and brakes function properly
- Machine has 2 headlights, 1 red tail light, 2 red reflectors, 2 amber flashers, and a slow-moving vehicle (SMV) sign

- Machine has a rollover protective structure (ROPS) and seatbelt
- All shields, guards, and warning decals are in place
- Safety interlocks are in place
- Hydraulic lines are marked for flow direction
- Machine is in good general repair: tires, muffler, mirrors, etc.

BUILDING AND STRUCTURE checklist items include (as applicable):

- Structure is sound
- Entrances are clear-no mud or ice buildup
- Floors, walkways, transport areas are clutter-free
- Doors and gates in animal handling areas are secure
- Work areas have proper lighting
- Chemicals are stored in original containers, in a locked area
- Personal protective equipment (PPE) is available and used (for dust, noise, & chemical exposures)
- Electrical hazards are minimized (breaker boxes are covered, GFCI's are in place in wet areas, etc.)
- Ventilation is adequate

OUTDOOR WORKING ENVIRONMENT checklist items include (as applicable):

- Driveway access is visible
- Roadways, traffic, and loading areas are well-maintained
- Tripping hazards are removed from all pathways
- Machinery and materials are stored safely
- Fencing and warning signs surround manure storage areas, ponds, and lagoons
- Overhead power lines have adequate clearance-no danger of contact
- Children have a designated safe play area
- Sand or de-icer is located near entrances during the wintertime
- Communication device is on hand when working alone

When the reviewer come to your farm, you as owner operator, manager, or person responsible for safety on your farm, are required to accompany the reviewer on his/her rounds. We encourage as many family members and workers as possible or reasonable to also accompany the reviewer. This is where important discussion and education occurs as the reviewer may see things. The reviewer may find previously overlooked hazards. The reviewer will explain why certain findings are hazards and how serious they are. The owner/operator may need to explain things that modify a recommendation, e.g. a particular machine is no longer used, or parts have been ordered to fix a machine in question.

If deficiencies were found to the extent that the farm could not be certified, the reviewer will schedule a repeat visit within six months to determine if the corrections have been made and that the farm can now be certified.

Appendix FSR.2 – Basic Farm Safety Check List Summary Sheet

(8.17.16)

This is a summary sheet from a farm review. This sheet is used to summarize results from the safety check, the reviewers evaluation. There are several versions of the full Farm Safety Check List. They are tailored for the type of operation. These maybe be found on the NASD Web site.

FARM SAFETY REVIEW - SUMMARY 1

Date:

ID:

Name:

Address:

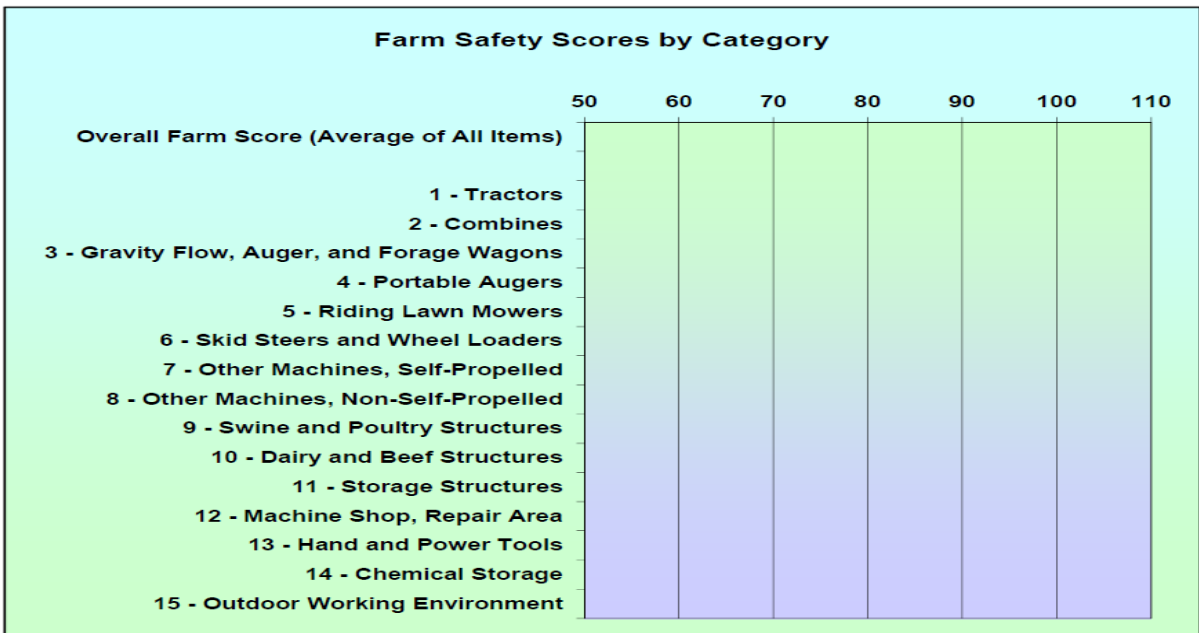
Phone:

Email:

Reviewer:

Notes:

Passed Farm Safety Review	
Overall Farm Score (Average of All Items)	
1 - Tractors	
2 - Combines	
3 - Gravity Flow, Auger, and Forage Wagons	
4 - Portable Augers	
5 - Riding Lawn Mowers	
6 - Skid Steers and Wheel Loaders	
7 - Other Machines, Self-Propelled	
8 - Other Machines, Non-Self-Propelled	
9 - Swine and Poultry Structures	
10 - Dairy and Beef Structures	
11 - Storage Structures	
12 - Machine Shop, Repair Area	
13 - Hand and Power Tools	
14 - Chemical Storage	
15 - Outdoor Working Environment	



Certified Safe Farm 2005

FSR.3 – OSHA Safety Hazards Relevancy Check List

(8.17.16)

OSHA Check list

The following check list is to be used in addition to the general CSF checklist, for those farms on which OSHA regulations are enforced. Even if your farm is under the small farm exemption and not subject to OSHA enforcement, it is recommended to follow these guidelines as best safety practices. Note, this is not an exhaustive checklist. It provides items that are relevant to the OSHA standard 29 CFR 1928, and common items that may fall under the General Duty clause of Standards 29 CFR 1910. The auditor would check yes if the specific regulated item appears to be in order. If not, then the auditor will check no, and in the comments section indicate what is not in order, and what needs to be done to bring the item to compliance.

Checklist for those farms where OSHA enforcement is applicable

On Farm Check List for OSHA Compliance			
Yes	No	Item	Comments/Corrections
		1. Rollover protection structures (ROPS) (designed to standards) are in place on all tractors with greater than 20 HP	
		2. Functional seat belts are in place on all tractors with ROPS	
		3. Evidence that employees are using seat belts when operating tractors	
		4. Training for safe operation of tractors is available and provided for employees at time of hire, and annually	
		5. Sanitary facilities are available for field workers to include potable water, toilet, and hand washing facilities	
		6. Is there a temporary labor camp on this farm?	
		7. If there is a temporary labor camp, is it sanitary and of safe design?	
		8. Is there anhydrous ammonia used and or stored on this farm?	
		9. If yes to above, are the storage structures of safe design?	
		10. If yes to above is there written documentation of safety training for handling of anhydrous ammonia	
		11. Are slow moving vehicle emblems of good visibility and properly affixed to all farm equipment that may travel on public roadways?	
		12. Is there a written hazard communication program?	
		13. Are SDS's (Safety Data Sheets) readily available to workers at all times?	

On Farm Check List for OSHA Compliance			
Yes	No	Item	Comments/Corrections
		14. Is there an SDS for each chemical used on the farm?	
		15. Are all chemical containers labeled?	
		16. Are shields in place over all rotating machinery?	
		17. When working at dusty tasks, is there more than 10 mg of dust exposure over an 8 hour work period?	
		18. Is there exposure to fumigants?	
		19. Is the required PPE available to workers?	
		20. Is there evidence of noise exposure of 85 decibels or greater over an 8 hour work period?	
		21. Is there evidence of a continual exposure of 90 decibels of noise or higher within a work place?	
		22. Is there evidence of single noise exposures of 140 decibels or higher?	
		23. Are OSHA Injury and Illness Logs up to date and kept on file for 5 years?	
		24. Is the OSHA workplace poster, "Job Safety and Health: It's the Law" posted in a conspicuous location?	
		25. Are there any other obvious safety or health hazards (evidenced by research publications, surveillance, or case record) not already noted on the general CSF check list?	

FSR.4 – CSF Corrective Action Sheet

(8.17.16)

The producer/manager must fill this sheet out following the reviewer's visit and consultation.

CERTIFIED SAFE FARM CORRECTIVE ACTIONS

Name: _____

	Make	Model	Corrective action made	Date	Initials
1. Tractors					
2. Combines					
3. Gravity flow, auger, forage wagons					
4. Portable augers					
5. Riding lawn mowers					
6. Skid steer and wheel loaders					
7. Other machines, self-propelled					

CERTIFIED SAFE FARM CORRECTIVE ACTIONS (cont'd)

Name: _____

	Make	Model	Corrective action made	Date	Initials
8. Other machines, non self propelled					
9. Swine and poultry structures					
10. Dairy and beef structures					
11. Storage structures					
12. Machine shop, repair area					
13. Hand and power tools					
14. Chemical storage					
15. Outdoor work environment					

CERTIFIED SAFE FARM CORRECTIVE ACTIONS (cont'd)

Name: _____

	Item(s) purchased	Are your PPE readily available?	How often do you use recommended personal protective equipment?
Personal Protective Equipment (PPE)			

	Item(s) purchased	Where do you keep these items?
First Aid Kits		
Fire Extinguishers		

FSR 5 – CSF PPE Core Competencies of CSF Reviewers to Recognize Proper Availability, Storage, and Use.

(8.17.16)

Core Competencies of CSF Reviewer on Recognizing PPE Use

- Auditors have the ability to initially recognize work activities/processes where PPE should be used
- Auditors are able to recognize what general type of PPE to use in these situations
 - This would include general recommendations, i.e. respirators, safety glasses, hearing protection etc. but not specified model number.
 - They are able to determine that the PPE equipment the farmer has on hand is in accordance with the specific recommendations of the nurse
- Auditors are able to recognize if the recommended PPE has been used appropriately (the correct respirator for the job, and that is properly worn), and is accessible, and is in safe working condition
- Auditors have the ability to recognize if the recommended equipment is properly and safely stored
- Auditors have the ability to recognize if the operator has the knowledge of what PPE he/she needs, and where to purchase it.
- Auditor is able to recognize when they need to contact the nurse for recommendations for what type of PPE is needed for the farmer
- The Reviewer should check to see if the Mother Box system (appendix CS.6) has been deployed, or an appropriate substitute system.

FS.6 - Communication Responsibilities between Reviewer and Clinician

(8.12.16)

Farm Safety Reviewer Communication Plan

Communication with local CSF Center (AgriSafe Clinic)

- Farm reviewer will contact nurse with questions regarding Safety Goals sheet
- Farm reviewer will contact nurse with questions regarding PPE
- Farm reviewer will contact nurse with questions or concerns about questionable areas of a farm
- Farm reviewer will conduct monthly meeting/call with nurse
- Farm reviewer will bill the local CSF center for farm review reimbursement

Communication with Farmers

- Farm reviewer will contact farmer after the occupational health screening has been completed.*
- Farm reviewer will conduct farm review
- Farm reviewer will assist farmer with achieving passing score on farm review

Note: In some cases, the farm review may occur prior to the occupational health screening.

CS.1 – CSF Occupational History Form

Occupational Health History Form

(8.17.16)

1.	Date of form completion (mm/dd/yyyy)	___ ___ / ___ ___ / _____
2.	Name	
3.	Social Security Number	_____ - _____ - _____
4.	Address	
5.	City, State, Zip	
6.	County of residence	
7.	Home phone number	_____ - _____ - _____
8.	E-mail address (if applicable)	
9.	Birth Date (mm/dd/yyyy)	___ ___ / ___ ___ / _____

10.	Marital Status	Married	1
		Single, living alone	2
		Single, living with partner	3
		Separated	4
		Divorced	5
		Widowed	6

11.	Estimate the amount of time you have spent working in the past 12 months?	on-farm ___ ___ % time at other job ___ ___ % time
-----	---	---

12. Please list your off-farm jobs in the past 10 years, starting with the most recent.

Job Title	# years worked at this job

13.	If you worked off-farm at any time in the <u>past 10 years</u> , were you exposed to any of the following at your job?	Chemicals	Yes	No
		Loud noise	Yes	No
		Heavy lifting	Yes	No
		Dust	Yes	No
		Other _____	Yes	No

14.	Including yourself, (principal farm operator), who currently lives in your home?	Relationship	Age	Gender
		(son, wife, etc)		
		Yourself		___ ___ M F
		Person 2	_____	___ ___ M F
		Person 3	_____	___ ___ M F
		Person 4	_____	___ ___ M F
		Person 5	_____	___ ___ M F
		Person 6	_____	___ ___ M F
Person 7	_____	___ ___ M F		

15.	How many family members work on your farm?	___ ___
-----	--	---------

16.	How many non-family members work on your farm?	___ ___
-----	--	---------

17.	Do children (grandchildren, children of friends and family) under age 18 visit your farm?	Yes No
-----	---	-----------

18.	Total number of acres you currently farm (including those owned and rented):	1-249	1
		250-449	2
		500-999	3
		1000+	4
		None	5

19.	Did you grow any of the following crops during the past 5 years....	Corn	Yes	No
		Soybeans	Yes	No
		Oats	Yes	No
		Sorghum	Yes	No
		Hay	Yes	No
		Organic Crops	Yes	No
		Other _____	Yes	No

20.	Do you <u>currently</u> raise.....	Swine	Yes	No
		Cattle	Yes	No
		Cow/calf	Yes	No
		Dairy	Yes	No
		Chicken, eggs	Yes	No
		Chicken, broilers	Yes	No
		Turkeys	Yes	No
		Horses	Yes	No
		Sheep	Yes	No
		Other	Yes	No

21.	At any time <u>in the past 5 years</u> , have you raised any of the following, and if so, were they raised in confinement?		Raised in past 5 years?		Raised in confinement?	
		Swine	Yes	No	Yes	No
		Cattle	Yes	No	Yes	No
		Cow/calf	Yes	No	Yes	No
		Dairy	Yes	No	Yes	No
		Chicken, eggs	Yes	No	Yes	No
		Chicken, broilers	Yes	No	Yes	No

Turkeys	Yes	No	Yes	No
Horses	Yes	No	Yes	No
Sheep	Yes	No	Yes	No
Other	Yes	No	Yes	No

21.	Do you self-apply manure on your farm?	Yes No
-----	--	-----------

22.	Are agri-chemicals applied on your farm?	Yes No (if no, go to question 27)
-----	--	--------------------------------------

23.	Have you used any of the following chemicals on your farm <u>in the past 12 months</u> , and were they <u>self-applied</u> ?		Used?		Self-applied?	
		Anhydrous ammonia	Yes	No	Yes	No
		Liquid fertilizers	Yes	No	Yes	No
		Granular fertilizers	Yes	No	Yes	No
		Insecticides	Yes	No	Yes	No
		Herbicides	Yes	No	Yes	No
		Pipeline cleaners	Yes	No	Yes	No
		Other: _____	Yes	No	Yes	No

24.	Please list up to 5 of the most heavily used herbicides, insecticides, and/or chemical cleaners that you have used on your farm in the past <u>12 months</u> .	
		1.
		2.
		3.
		4.
		5.

25.	Indicate the frequency with which you currently use the following types of personal protective equipment when working with farm chemicals.	Always	Sometimes	Never	Not Applicable	
		Eye protection	1	2	3	4
		Chemical resistant gloves	1	2	3	4
		Chemical resistant boots	1	2	3	4
		Chemical resistant	1	2	3	4

disposable coveralls				
Respirator	1	2	3	4

26.	When you self-apply pesticides, do you....	Always	Sometimes	Never	Not Applicable
	wear clean, washed clothes every day	1	2	3	4
	change clothes immediately, if contaminated	1	2	3	4
	wash your work clothes separate from your family's	1	2	3	4
	wash your hands <u>before</u> eating	1	2	3	4
	wash your hands <u>before</u> urinating	1	2	3	4
	wash your hands <u>before</u> smoking	1	2	3	4

27.	Has a physician or health care provider diagnosed you with a hearing loss?	Yes No (if no, go to question 30)
-----	--	--------------------------------------

28.	When were you diagnosed? (yyyy)	_____
-----	---------------------------------	-------

29.	Do you wear a hearing aid?	Yes No
-----	----------------------------	-----------

30.	In the past 12 months, have you been exposed to loud noise in your:		
		farm work (tools, machinery, animals?)	Yes No
		recreational activities (loud music, gunfire?)	Yes No
	off-farm work?	Yes No Not applicable	

31.	How often do you experience.....	Always	Sometimes	Never
-----	----------------------------------	--------	-----------	-------

	ringing in the ears?	1	2	3
	dizziness	1	2	3
	difficulty understanding conversations?	1	2	3

32.	When you are exposed to loud noise, how often do you use the following hearing protection?		Always	Sometimes	Never
		Ear plugs	1	2	3
		Ear muffs	1	2	3

33.	Have you been diagnosed with a vision loss or decline?	Yes No(<i>if no, go to question 37</i>)
-----	--	--

34.	When were you diagnosed? (yyyy)	____ _
-----	---------------------------------	--------

35.	Has your vision declined with (circle all that apply):		
		distance	Yes No
		close-up vision	Yes No

36.	Do you wear corrective lenses?	Yes No
-----	--------------------------------	-----------

37.	When you work with power tools, how often do you wear the following types of eye protection?		Always	Sometimes	Never
		Goggles	1	2	3
		Safety Glasses	1	2	3
		Face shield/face mask	1	2	3
		Welding mask/welding glasses	1	2	3
		Other_____	1	2	3

38.	In the past <u>12 months</u> , how often have you experienced any of the following symptoms as a result of an on-		Never	Less than monthly	Monthly	Weekly	Daily
-----	---	--	-------	-------------------	---------	--------	-------

farm exposure (such as dust, fumes and vapors)?	Dry cough	1	2	3	4	5
	Chest tightness	1	2	3	4	5
	Cough w/ phlegm	1	2	3	4	5
	Throat irritation	1	2	3	4	5
	Wheezing chest	1	2	3	4	5
	Sinus problems	1	2	3	4	5
	Stuffy nose	1	2	3	4	5
	Headache	1	2	3	4	5
	Ears popping	1	2	3	4	5

39.	What type(s) of farm work seem to cause these symptoms?	a.
		b.
		c.

40.	Is there a specific season when these symptoms are worse?	Yes No (if no, go to question 42)
-----	---	--------------------------------------

41.	In what season are the symptoms at their worst?	
-----	---	--

42.	During the past 12 months, have you experienced flu-like symptoms (shivering, muscle or joint aches, chest tightness, or headache) after an extra heavy dust exposure, such as cleaning a grain bin, moving or sorting hogs, or opening a silo?	Yes No
-----	---	-----------

43.	How often do you wear respiratory protection when working among:		Always	Sometimes	Never	Not Applicable
		Grain dust	1	2	3	4
		Silo dust	1	2	3	4
		Other dusty	1	2	3	4

environments				
Treating/ processing hogs	1	2	3	4
Feeding livestock	1	2	3	4
Moving hogs	1	2	3	4
Powerwashing/ disinfecting	1	2	3	4
Handling grain/ Grinding feed	1	2	3	4

44.	What type of respiratory protection do you use when working among:	1-strap disposable mask	2-strap disposable mask	Half-mask with cartridge	Full-mask with cartridge	Other	None used
	Grain dust	1	2	3	4	5	6
	Silo dust	1	2	3	4	5	6
	Other dusty environments	1	2	3	4	5	6
	Treating/ processing hogs	1	2	3	4	5	6
	Feeding livestock	1	2	3	4	5	6
	Moving hogs	1	2	3	4	5	6
	Powerwashing/ disinfecting	1	2	3	4	5	6
	Handling grain/ Grinding feed	1	2	3	4	5	6

45.	Where do you purchase your personal protective equipment?	
-----	--	--

46.	Please put a check mark next to the statement that best describes your smoking behavior?	I have never smoked	
		I used to smoke, but not anymore	
		I currently smoke	

47.	Do you use smokeless tobacco?	Yes
-----	-------------------------------	-----

		No
--	--	----

48.	Have you ever been diagnosed with skin cancer?	Yes No <i>(if no, go to question 50)</i>
-----	--	--

49.	When were you diagnosed? (yyyy)	____ _
-----	---------------------------------	--------

50.	Do you have any pigmented spot(s) that have changed in size, color, contour, or thickness recently?	Yes No
-----	---	---------------

51.	Are there any areas on your skin which bleed or will not heal?	Yes No
-----	--	---------------

52.	Do you have any mouth sores or irritations?	Yes No
-----	---	---------------

53.	Do you have any suspicious area(s) on your skin that you are concerned about?	Yes No
-----	---	---------------

54.	When outside, how often do you.....		Always	Sometimes	Never
		Use tractors with a cab or canopy?	1	2	3
		Wear long sleeves when in sun?	1	2	3
		Use hat with a wide brim in the summer?	1	2	3
		Use sunscreen?	1	2	3

55.	During the past 12 months have you had any ache, pain, or discomfort in your.....			
		Neck?	Yes	No
		Shoulder?	Yes	No
		Upper back?	Yes	No

Elbow?	Yes	No
Low back?	Yes	No
Wrist/hand?	Yes	No
Hip/thigh?	Yes	No
Knee?	Yes	No
Feet?	Yes	No

56.	Have any of the above musculoskeletal conditions prevented you from working in the <u>past 30 days</u> ?	Yes
		No

57.	Have any musculoskeletal conditions motivated you to see a health care provider?	Yes
		No

58.	What is the name of your personal physician? (Optional)	
-----	---	--

59.	In general, how would you rate your health, as compared to others your own age?		
		Excellent	1
		Very good	2
		Good	3
		Fair	4
		Poor	5

60.	Do you currently have any health problem(s)?	Yes
		No <i>(if no, go to question 63)</i>

61.	Please specify your health problem(s):	1. _____ 2. _____ 3. _____ 4. _____
-----	--	--

62.	Please list any prescription and/or over the counter medications you currently take daily	Name of medication	Reason for its use
-----	---	--------------------	--------------------

	or when needed:		
		1.	1.
		2.	2.
		3.	3.
		4.	4.
		5.	5.

63.	Do <u>you</u> or any family members (parents, siblings, children) have any history of the following diseases?		<u>YOU</u>		<u>FAMILY MEMBER</u>		Specify Relationship (parent, <u>child</u> , sibling)
		Asthma	Yes	No	Yes	No	
		Emphysema	Yes	No	Yes	No	
		Hay fever	Yes	No	Yes	No	
		Allergies	Yes	No	Yes	No	
		Lung cancer	Yes	No	Yes	No	
		Other lung problems (specify type) _____	Yes	No	Yes	No	
		Heart disease	Yes	No	Yes	No	
		High blood pressure	Yes	No	Yes	No	
		Stroke	Yes	No	Yes	No	
		Diabetes	Yes	No	Yes	No	
		Kidney disease	Yes	No	Yes	No	
		Liver disease	Yes	No	Yes	No	
		Cancer (specify type) _____	Yes	No	Yes	No	
		Arthritis	Yes	No	Yes	No	
Other (specify type) _____	Yes	No	Yes	No			

64.	When did you last receive the following health services:		Within the year	1-3 years ago	> 3 years ago	Never
		Routine check-up/physical	1	2	3	4
		Blood pressure check	1	2	3	4
		Cholesterol check	1	2	3	4
		Colorectal exam	1	2	3	4
		Eye exam	1	2	3	4
		Dental exam	1	2	3	4
		Diabetes screening	1	2	3	4

Flu shot	1	2	3	4
Prostate exam (men only)	1	2	3	4
Mammogram (women only)	1	2	3	4
Pap smear (women only)	1	2	3	4

65.	When was the date of your last tetanus shot? (yyyy)	_____
-----	---	-------

66.	How would you rate your overall stress level in the past year?		
		Very low	1
		Low	2
		Medium	3
		High	4
	Very high	5	

67.	Have any of the following been a problem for you in the last 12 months?			
		Poor appetite	Yes	No
		Feeling lonely	Yes	No
		Blaming yourself for things	Yes	No
		Feeling hopeless about the future	Yes	No
		Worrying too much about things	Yes	No
	Thoughts of ending your life	Yes	No	

68.	In the past year, have you had a farm related injury that required medical attention?	Yes No(<i>if no, go to question 71</i>)
-----	---	--

69.	In the past year, how many farm-related injuries have you had that required medical attention?	_____
-----	--	-------

70.	Describe your most serious injury.	
-----	------------------------------------	--

71.	In the past year, has <u>anyone else in your family</u> had a farm-related injury that required medical attention?	Yes No
-----	--	-----------

72.	How many cups of caffeinated coffee, tea, or pop do you drink daily?	_____
-----	--	-------

73.	Do you drink your water from a private well?	Yes No(<i>if no, go to question 75</i>)
-----	--	--

74.	Has your well been tested in the past 12 months?	Yes No
-----	--	---------------

75.	How many <u>days</u> in a week do you get at least 30 minutes of continuous exercise such as running and biking, exclusive of farm work?	____
-----	--	------

76.	Do you have any concerns you would like to discuss with the nurse?	Yes No
-----	--	---------------

77.	If yes, please specify.....	
-----	-----------------------------	--

THANK YOU FOR COMPLETING THIS SURVEY.
PLEASE TAKE THIS WITH YOU WHEN YOU GO TO THE CLINIC SCREENING.

CS.2 – Clinical Screening Form

(8.17.16)

CSF Occupational Health, Safety, and Wellness

Date: ____/____/____

ID# _____

Name _____

Address _____

Telephone # ____ - ____ - ____ **Social Security #** ____ - ____ - ____

Clinical Screening Form (8.12.16 version)

CLINICAL DATA Age _____ Wt _____ Ht _____

CARDIOPULMONARY

Blood Pressure: Cuff Size: Regular Large
 Time 1 R/A _____ L/A _____
 Time 2 R/A _____ L/A _____

Apical: _____/minute Regular _____ Irregular _____

Respirations: _____/minute

Lung Auscultation: clear _____ diminished _____

Comments:

Ed: Results ____ Exposures ____ BP recommendations ____
 Smoking ____ PPE types, pros & cons, protection factors ____

Pulmonary Function Screening

	Predicted	Actual	% Predicted
FVC	Liters	Liters	_____ %
FEV₁	Liters	Liters	_____ %
FEF 25/75%	Liters	Liters	_____ %

FEV1/FVC%	Actual Percentage _____ %
------------------	----------------------------------

VISION

OD 20/____ **OS** 20/____ **OU** 20/____

Corrected: Y____ N____ If yes: Glasses ____ Contacts____ Surgery____

Ed: Hazards ____ No contact lenses ____ PPE types ____ Vented vs. Non-vented goggles

SKIN SCREENING Document any suspicious areas noting location, lesion(y/n), color, shape, size, and any drainage. If the patient has had skin cancer removal performed, please note where/when.

Location: Head _____ Neck _____

Chest _____ Back _____

Extremities _____ No noted lesions _____

Comments:

Ed: Sun protection ____ Self-exam ____ Chemical protection/PPE ____ Smokeless tobacco

Date: ___/___/___

Name _____

HEARING

Otoscope Exam - Appearance:

Right: Normal ___ Wax ___ Red ___ Swollen ___

Left: Normal ___ Wax ___ Red ___ Swollen ___

Uses Hearing Device: Yes No **Uses Hearing Protection:** Yes No
If yes, what type: _____

Audiogram Results

kHz	.5	1	2	3	4	6	8
Left							
Right							

Ed: Results ___ Hazards ___ NIHL explanation ___ PPE types ___

LAB RESULTS

Cholesterol: _____ u/l Date: ___/___/___

Ed: Results ___ Exercise ___ Diet ___

Cholinesterase: _____ u/l Date: _____

Ed: Results ___ S&S ___ When to Repeat Test ___

Tetanus: Date of Most Recent Shot: ___/___/___

Site of Shot Given _____ Lot

Ed: Side effects ___ Release form ___ When to Repeat Shot ___

MUSCULO/SKELETAL

Back: Current pain: Yes No **Injury Related:** Yes No

Current Treatment(circle): MD / Chiropractor / PT/ Other _____

Comments: _____

Extremity: Arm R/L **Current pain:** Yes No **Injury Related:** Yes No

Current Treatment: MD / Chiropractor / PT/ Other _____

Comments: _____

Leg R/L **Current pain:** Yes No **Injury Related:** Yes No

Current Treatment: MD / Chiropractor / PT/ Other _____

Comments: _____

Other: Current pain: Yes No **Injury Related:** Yes No

Current Treatment (circle): MD / Chiropractor / PT/ Other _____

Comments: _____

Ed: Proper body mechanics ___ Physical fitness ___ Proper Wt/Wt loss ___

GENERAL HEALTH EDUCATIONAL REVIEW

Male: ___ 18-35 testicular self-exam
___ >35 yearly rectal & prostate
___ >35 yearly guiac

Female: ___ self-exam
___ yearly pelvic
___ mammogram over 35

Stress: S & S ___ Techniques ___ Community resources ___

Date: ___/___/___ Name _____

Drinking Water: Rural/Town Water System ___ Bottled Water ___
 Well Water ___ **If yes to well water**, date of annual test/with infant <6 months or frail elderly ___

Radon: Discussed Testing Y N

Educational Information Sent Home: Y N

NURSING CONCERNS: R= Referred M= Monitored Without Referral

Wt ___ Choles ___ Cholin ___ Audio ___ Vis ___ Resp ___ Smk ___
 B/P ___ Skin ___ Chwtb ___ Mus/Skl ___ H₂O ___ Stress ___

PERSONAL PROTECTIVE EQUIPMENT LOG

	Purchase Date	Type of PPE	Fit Demo(Y/N)	Reviewed PPE Storage & Care (Y/N)
Respiratory				
			Fit Test (Y/N)	
Vision				
Skin				
Hearing				
Chemical				
Other				

SUMMARY

Follow up Letters Sent & Reasons for Referral:

Primary Care Physician _____

Specialist _____

Dermatologist _____

Other _____

Nurse Signature: _____ **Date:** ____/____/_____

CS. 3 – CLIENT HEALTH AND SAFETY GOALS (8.17.16)

Name:	Date:
--------------	--------------

CLIENT HEALTH & SAFETY GOALS

HEALTH GOALS

NURSING CONCERNS

	Result	Referral	Monitor	None		Referral	Monitor	None
Weight					Musculo/ skeletal			
Blood Pressure					Smoking			
Cholesterol					Smokeless Tobacco			
Cholinesterase					Stress			
Respiratory					Water			
Vision					Male General			
Hearing					Female General			
Skin								
Blood glucose								

SAFETYGOALS

PERSONAL PROTECTIVE EQUIPMENT LOG

	Type of PPE Recommended	Purchase Date	Fit Demo(Y/N)	Reviewed PPE Storage & Care (Y/N)
Respiratory				
Vision				
Skin				
Hearing				
Chemical				
Other				

Health Professional Signature: _____

Date: _____

Client Signature: _____

Date: _____

CS.4 – Personal Protective Equipment Guide Protocol

(8/17/16)

CSF Personal Protective Equipment (PPE) Protocol

The purpose of this protocol is to insure that all CSF clients are provided with appropriate and consistent information regarding recommendations for PPE based on exposures, health issues of the client, and the work environment. The intent is also to make certain the farm reviewer is aware of what PPE has been recommended so they can score that section of the farm review.

1) Client visit to the clinic

- a) Occupational health screening
 - i) The nurse will utilize various resources to assist in making PPE recommendations. These resources include the CSF PPE Educational Packet (see Appendices CS.5, CS.6, CS.7), information from the Agricultural Medicine Training Program, and the AgriSafe Networks Respiratory Selection Guide (http://www.uvm.edu/extension/vtfarmhealth/resources/respiratory/as_respirator_selection_guide.pdf).
 - ii) The nurse will review the clients occupational history form
 - iii) The health care provider will review “Triggers for Making Personal Protective Equipment Recommendations in the Certified Safe Farm Checklist,”
 - iv) The nurse will perform the occupational health screening
 - v) Based on the considerations above and the health screening information, the nurse should develop a “*PPE prescription*” for the farmer and record this on the revised Safety Goals sheet (Appendix CS.3).
- b) PPE prescription
 - i) The PPE prescription recorded on the Safety Goals sheet should be as specific as possible and should include the type of PPE needed and model numbers. The nurse should mention that the PPE can be ordered directly from their clinic, The AgriSafe Network, Gemplers, or other supplier, and give the farmer an order form or contact number for ordering in the future. (Note the PPE Mother Box Program provides a managed way to accomplish this goal [Appendix CS.6]),
 - ii) The nurse should hand out and discuss a copy of the CSF PPE Educational flier (Appendix CS.7),
 - iii) The nurse, farmer, reviewer, and local CSF facilitator will all receive a copy of the Safety Goals sheet which includes the PPE prescription. Also, any concerns the nurse may have related to on-farm hazards should be expressed to the farm reviewer so the reviewer can examine the farm closely regarding the nurses concerns.
 - iv) The nurse should explain that auditors will check if the farmer has the prescribed PPE and if it is conveniently and properly stored.
 - v) When the farmer leaves the clinic he will have a copy of their PPE prescription (Safety Goals Sheet) and a copy of the CSF PPE Flyer (Appendix CS.7) that includes information on many topics for the farmer. The farmer should also leave with either an AgriSafe (or other supplier) order form or with knowledge of who to contact and how to order more PPE.

2) Farm Review Visit

- a) The reviewer will prepare for the on-farm review using the CSF checklist appropriate for that farm. During this, the reviewer should note areas of concern that the AgriSafe nurse should be made of aware of such as work in confined livestock facilities, operation of tractors without cabs, handling and application of ag chemicals, welding, and shop work. The reviewer should contact the AgriSafe nurse and discuss their concerns.
- b) The reviewer will come to the farm with a copy of the Safety Goals sheet which includes the “PPE prescription” and be ready to ask the farmer to show them their farmer’s PPE. The reviewer will note if the PPE used matches the PPE recommended from the clinic visit. Also, the farm reviewer will inspect the PPE to see if it is stored correctly, easily accessible, and in working condition.
- c) The reviewer should pay close attention to Section C “Operations concerns.” Using a copy of the “Triggers’ document, the reviewer should mark “yes” when applicable in Section C.
- d) The reviewer should have copies of the CSF PPE Educational packet, go over it briefly (especially sections 1 & 2), and leave a copy with them for their notebook (if they do not already have one.)

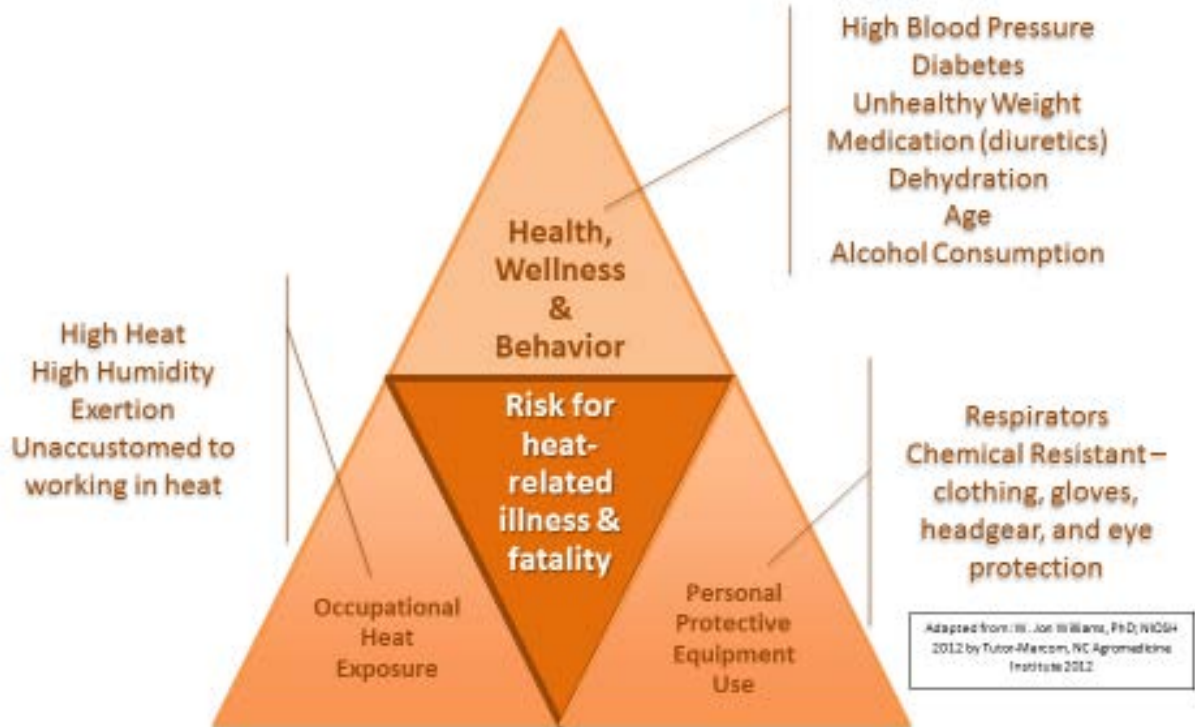
3) Communication between AgriSafe nurse and farm reviewer

- a) The Nurse will forward to the Farm Reviewer a copy of the Safety Goals sheet prior to the scheduled Farm Site Review in a manner that is convenient for both parties. If necessary the AgriSafe nurse will communicate any special concerns they have about their farmers to the reviewers so the reviewers can inspect conditions on the farm that are related to these concerns.
- b) Reviewers will note any on-farm hazards that may be of concern and contact the AgriSafe nurse to discuss these concerns
- c) The nurses and reviewers will communicate on a monthly basis to address any concerns with their farmers. Additionally, a joint conference call with the nurses and reviewers will be held bi-annually to discuss questions, concerns, or protocol issues.

CS.5 – Health and Its Relationship to Heat and PPE Use

(8.13.16)

Health and Its Relationship to Heat & PPE Use



CS.6 – Personal Protective Equipment Storage and Supply Protocol “The Mother Box Concept”

The Mother-Box Concept: (8.17.16)

The Mother-Box Concept is a management tool to help assure that the right personal protective equipment (PPE) and first aid equipment is always conveniently available to workers when needed. The following details the concept and contents of the PPE Mother Box. (Note the a First Aid Mother box is the same concept as the PPE Mother Box. The recommended contents of the first aid mother box may be seen on pp. 386-390 of the text *Agricultural Medicine: Rural Occupational and Environmental Health, Safety, and Prevention*, Donham and Thelin, 2016).

The PPE Mother Box and PPE recommendation Protocol:

The clinical screening will include an analysis of the work practices on each farm and recommendations of appropriate personal protective equipment (PPE).

The clinician will assist with selection of appropriate PPE that will be appropriately fit, adequately protective and can be comfortably worn by the worker. The clinician will inform and demonstrate the importance of proper fit, comfort, and wearing of PPE. Field self-adjustment for fit will be demonstrated and fit testing preformed as available and/or required.

To ensure that workers have convenient access to PPE at all times, the development of a “Mother-box” is recommended. The mother-box concept ensures that PPE is available and accessible to workers at all times. To help assure successful implementation and maintenance of the Mother Box, the CSF Health professional in communication and collaboration with the CSF Reviewer, should accomplish the following steps.

- Determine exposures according to their operation, and relevant PPE to protect for those exposure
- Select appropriate PPE for the job and that is comfortable for the wearer.
- Generates an inventory list for that includes the necessary PPE for the farm and it workers (a sample inventory list is attached)
- Recommend a foot locker container be acquired (a good example of one that works well is by Sterilite – model 1842, the dimensions which are in inches, 31 ¼ x 17 5/8 x 13 7/8) to contain the PPE Mother box.
- The inventory list is attached to the box, with extra lists or forms that are used to reorder the appropriate PPE.
- An arrangement is made with a provider (e.g. AgriSafe, or Gemplers) who will send the needed materials to supply/resupply the box as the inventory list is received.
- One person on the farm is designated to monitor and manage the Mother Box. That person should be the owner operator, or his designate (e.g. farm safety officer).
- Each worker on the farm should then have a satellite CSF “fanny pack” to carry the usual PPE they need for the day. The CSF fanny pack should be tailored for the needs of the individual worker, and could include such PPE items as safety glasses, ear plugs, and sunscreen. Satellite fanny-pack can re-supplied from the mother box.

PPE MOTHER BOX

Personal Protective Equipment Inventory list and Reorder Form

Location Needed in addition to the mother box contents	Equipment Needed for your Operation	Unit of Measure	Units needed in Mother Box	e.g. of Price(estimated)	Order Quantity Needed
	<p>Bilson Leighting Noise protective Ear Muffs</p> <p>Noise reduction rating (NRR) 27dB. If worn properly, the actual exposure will reduce by 27dB, which will give adequate protection in most agricultural setting. Cannot be worn with a hat as it will not seal along the head.</p>	1/box		-	
	<p>Howard Light Max Ear Plugs</p> <p>Noise reduction rating (NRR) 25 - 30. Can be worn with a hat, cooler than muffs. Smooth soil resistant bell shaped ear plug provides good in-ear comfort, easier to insert, stays in place.</p>	100/box		\$23.00	
	<p>Ear Ultra Fit Ear Plugs</p> <p>Noise reduction rating (NRR) 25db. Flexible curved flanges "hug" the ear canal for a comfortable fit and an effective seal against noise. Washable plastic for multiple reuse of this ear plug.</p>	200/box		\$86.00	



	<p>Nitrile 15ml Chemical Resistant Gloves – Size 8</p> <p>Nitrile glove provides a combination of strength and chemical resistance. Use for handling pesticides, fertilizers including anhydrous. Reusable. Resist cuts, punctures, and abrasions.</p>	1 pair		\$2.00	
	<p>Nitrile 15ml Chemical Resistant Gloves – Size 10</p> <p>Nitrile glove provides a combination of strength and chemical resistance. Use for handling pesticides, fertilizers including anhydrous. Reusable. Resist cuts, punctures, and abrasions.</p>	1 pair		\$7.00	
	<p>Clear Safety Glasses</p> <p>Temples are cushioned to relieve behind the ear pressure. Browguard and sideshields for complete eye protection. Polycarbonate lenses are easy to replace. Meets ANSI Z87.1 and CSA Z94.3 standards. Shop and general agricultural use.</p>	Each		\$10.00	
	<p>Unex Amber Safety Glasses</p> <p>Dual 9-base wrap-around lens provides uncompromised peripheral vision and protection. Soft flexible fingers adjust and conform to any nasal profile and minimize slippage. Made in USA meet ANSI Z87.1-1989 and meets Mil VO ballistic test for impact. Shop and general agricultural use.</p>	Each		\$7.00	
	<p>Particulate Respirator 3M 8210 (N95)Exposures/uses: Sanding, sweeping, grinding, sawing, livestock and poultry, grain handling, silo unloading</p>	20/box		\$10.00	
	<p>Particulate Respirator 3M 8511 (N95)</p> <p>Exposures/uses: Sanding, sweeping, grinding, woodworking, sawing, livestock and poultry, grain handling, cleaning grain bins, silo unloading. Contains exhalation valve to reduce moisture build up and reduce fogging of glasses in cool weather.</p>	10/box		\$10.00	
	<p>Particulate Respirator 3M 8233 (N100)</p>	1/bag		\$8.50	

	<p>Exposures/uses:</p> <p>Grinding, welding, grain dust including cleaning bins with molding grain, working with lead or in situations where mold, cadmium, or arsenic are present.</p>				
	<p>Half Mask Respirator WM 6000</p> <p>This is a light weight reusable respirator that can be washed and reused multiple times. This respirator has easy-to-adjust head straps and a low-profile design which allows safety glasses to be worn. It is designed for use with 3M filters and cartridges which are sold separately for specific respiratory hazards. Available in Small, Medium and Large sizes.</p> <p>Exposures/uses: Choose the proper cartridge for your activity: Grinding, welding, grain dust including cleaning bins with molding grain, working with lead or in situations where mold, cadmium, or arsenic are present.</p>	1/bag		\$12.00	
	<p>Organic Vapor Cartridge for 3M Half Mask Respirator</p> <p>Exposures/uses: Approved for respiratory protection against organic vapors. Examples are Pesticides and Paint.</p>	2/pack		\$11.00	
	<p>Organic Vapor/Acid gas Cartridge for half Mask Respirator – 3M</p> <p>Exposures/uses: Approved for respiratory protection against organic vapors, chlorine, hydrogen chloride and sulfur dioxide. Examples are Pesticides, Paint, and Disinfectants.</p>	2/pack		\$11.00	
	<p>Ammonia / Methlyamine Cartridge for Half Mask Respirator</p> <p>Exposures/uses: Approved for respiratory protection against Ammonia and Methylamine. Examples are exposures common in Poultry and Hog confinements.</p>	2/pack		\$12.50	
	<p>P100 Particulate Filter 3M 2091</p> <p>Exposures/uses:</p>	2/pack		\$6.50	

	Protection against particulates. At least 99.97% filtration efficiency against solid and liquid aerosols including oils.				
	3M P95 Particulate Filter 2071 Exposures/uses: At least 95% filtration efficiency against solid and liquid aerosols including oils. Protection against particulates.	2/pack		\$3.50	
	P95 Particulate Filter – 3M Exposures/uses: Protection against particulates, nuisance level Organic Vapor/Acid Gas. At least 95% filtration efficiency against solid and liquid aerosols including oils.	2/pack		\$3.50	
	North 7700 Series Half Mask Respirator This is a light weight reusable respirator that can be washed and reused multiple times. This respirator has easy-to-adjust head straps and a low-profile design which allows safety glasses to be worn. It is designed for use with NORTH filters and cartridges which are sold separately for specific respiratory hazards. Available in Small, Medium and Large sizes. Exposures/uses: Choose the proper cartridge for your activity: Grinding, welding, grain dust including cleaning bins with molding grain, working with lead or in situations where mold, cadmium, or arsenic are present.	1/bag		\$27.00	
	Organic Vapor Cartridge for North Half Mask Respirator Exposures/uses: Examples are Pesticides and Paint.	2/pack		\$10.00	
	Ammonia/Methylamine Cartridge for North Half Mask Respirator Exposures/uses: Examples are exposures common in Poultry and Hog confinements.	2/pack		\$10.00	
	Organic Vapor/Acid Cartridge for North Half Mask Respirator Exposures/uses:	2/pack		\$10.00	

	Examples are Pesticides, Paint, and Disinfectants.				
	P100 HEPA Cartridge Exposures/uses: Agricultural uses include grain dust and molds.	2/pack		\$7.50	
	P100 HEPA Filter Exposures/uses: Grain bins, exposures to moldy hay, and hog, poultry or cattle confinement buildings.	2/pack		\$7.50	
	N95 Non-oil Particulate Filter Exposures/uses: Can also be used in combination a filter holder and filter cover to provide protection from dusts and mists.	10/box		\$10.00	
	Stealth – Clear Lens The shape of the stealth goggle lens expands the peripheral viewing area and indirect ventilation helps prevent fogging while still protecting eyes.	1/bag		\$13.00	
	Blue Lizard Australian Sunscreen, SPF 30	1/bottle		\$15.00	
	SunX Sunscreen towlettes	25/box		\$12.50	
	Radnor Large Tan Welding Gloves	1 pair		\$7.50	
	3M Airstream Powered Air Purifying Respirator System	1 mask		\$700.00	
	Sun Safe Hat Brimmed	1 hat		\$14.00	
	Sun Safe Hat Billed	1 hat		\$11.00	

1. Location needed: s=shop, g=grain facilities, l=livestock, m=machinery, others (list)
2. The Equipment needed in your box should be selected for your particular operation and workers. (Not all the equipment above is needed for every operation). The brand names listed are only for example. Other brands in the relative category may be selected. For specific recommendations for a particular farm, consultation should be sought with a CSF, AgriSafe, trained professional or other health and safety professional with production agricultural health experience.
3. This is the number you would want to have in the box that would cover the needs of your workers for at least one month
4. This represents only an estimate of price for this the equipment in this class. The price may vary depending on the supplier with whom you have an agreement.
- 5 Order the number of units to bring the inventory up to the number as indicated in the "Units needed" column.

CS.7 – Personal Protective Equipment Client Education Flyer

(8.17.16)



Protect Your Health with PPE








Tips for Selecting and Storing Personal Protective Equipment (PPE) on the Farm

Dust, gas, noise, and other exposures may be a risk to your health. Personal Protective Equipment (PPE) can help you protect your health, but it is important to select the right PPE, and store it properly.

Selection and Fitting of PPE:

The Certified Safe Farm (CSF) health screening at the clinic visit includes a discussion of the type of farming you do and what PPE are appropriate on your farm. You can try various types of PPE and receive fit testing for respirators. When the safety reviewer visits your farm, he/she will pay attention to the availability and condition of PPE. Based on discussions with you, CSF staff will create a PPE “prescription”, which indicates your PPE needs. You can purchase PPE at the AgriSafe Network (Safety Store), Gemplers, or other location. Be aware that there are PPE on the market that provide little or no protection. Below are examples of PPE for some farm tasks. Please note and employ the CSF Mother Box concept (for PPE and first aid) as this program will assure you have the correct supplies needed and conveniently available.

	RESPIRATORY PROTECTION
	Disposable dust mask is helpful in animal confinements, grain handling facilities and other dusty environments. Check that the mask has NIOSH approval and N95 or N100 dust reduction rating. One-strap masks or surgical masks may be inexpensive, but do not provide protection for fine dust particles.
	Half-face mask provides protection against dust and gases in many conditions. Most have very effective P100/HEPA filter cartridges available for dust. Paints, solvents, and pesticides require organic vapor cartridges. Ammonia, chlorine, and other gases may require specific filters. Consult with AgriSafe to fit-test and find the right type of respirator and filter cartridges for your application.
	EYE / FACE PROTECTION

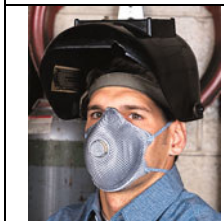
 	<p>Use eye and face protection when power washing, mixing chemicals, using grinders, metal- or wood working equipment, or other situations where you are exposed to splashes, projectiles, sparks etc. There are many options:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Face shield <input type="checkbox"/> Goggles (vented and non-vented) <input type="checkbox"/> Protective glasses <input type="checkbox"/> Protective eye glasses with optical correction
HEARING PROTECTION	
 	<p>Use hearing protection when exposed to noise. There are many options:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expandable foam plugs <input type="checkbox"/> Pre-molded, re-usable plugs <input type="checkbox"/> Canal caps (in picture above) <input type="checkbox"/> Ear muffs (in picture below) <p>When selecting hearing protection, make sure they are approved and have a noise reduction rating, at least NRR 20 (20 dB noise reduction). For loud noise from tractors, machinery, chainsaws, swine, or guns, use ear muffs with at least NRR 30 rating. Ear plugs typically provide 10-30 dB noise reduction. Ear muffs provide 20-38 dB reduction. There are many products on the market that are not approved, providing much less protection.</p>
HAND / SKIN PROTECTION	
 	<p>Use protective gloves when exposed to chemicals or wet work. There are many options:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Disposable nitrile gloves <input type="checkbox"/> Chemical resistant gloves for pesticides, solvents <input type="checkbox"/> Cotton liner gloves to reduce irritation from rubber/chemical gloves <input type="checkbox"/> Special gloves for welding, cutting, chain saws <p>Check with the AgriSafe clinic regarding which gloves provide protection for your needs.</p>
FOOT PROTECTION	
	<p>Use safety boots with toe protection for most jobs around the farm. Many new safety boots are light, comfortable, and durable – well suited to be your regular work boots on the farm. For livestock work or chemicals, you may need safety boots that are designed for wet conditions. There are many options available.</p>
SPECIAL PROTECTION	



Use **disposable coveralls**, **respirator** with organic vapor cartridges, **chemical gloves**, and **boots** when mixing pesticides – especially those marked “danger”, “poison” or “warning” on their product label.



Use a **helmet set** with **ear muffs** and **face screen** when using a chainsaw or a clearing saw (brush cutter).



Use special welding protection, **face shield**, **gloves**, **apron**, **safety boots** when welding or cutting metal. You may also need a **respirator** for protection from welding fumes.



Use **wide-brim hats** and **long-sleeve shirts** for sun protection.

Storing PPE

PPE should be stored so that they are readily available when and where needed, and protected from dust, moisture and contamination. Note the Mother Box program help assure proper storage and convenient accessible supplies.

	<p>We recommend a central location on the farm for storing most PPE supplies. This could be a cabinet in the office or machine shed – the main thing is that PPE is clean and easily accessible.</p>
	<p>In addition, we recommend keeping specific PPE in locations where they are regularly needed. This includes the machine shop (welding protection, metal working PPE), livestock facilities (respiratory and hearing protection), tractors and combines (hearing protection), feed and grain facilities (respiratory protection), and chemical storage areas (PPE for pesticides, chemicals). The photos show examples of PPE storage.</p>

QA.1 – Quality Assurance Form for on Farm Review

Certified Safe Farm Farm Audit Quality Assurance Plan (8.17.16)

Objective	Activities	Performance Period	Responsible Individual
1) Improve the quality of the audits turned in by auditors	Call Reviewers to see if they have questions or suggestions	Monthly	
	Send newsletters with training points to Reviewers	Six per year	
	Conduct ride-along with each reviewer	Yearly	
	Review audits for errors or questionable markings	As they are sent in	
	Conference call with CSF nurses to discuss program	Every 2 months	

Objective	Activities	Performance Period	Responsible Individual
2) Develop and conduct new training program for farm auditors	Find two farms to use as “training farms”		
	Develop new detailed training materials		
	Conduct training update for all auditors to attend		

QA.2 – Clinical Occupational Health and Wellness Screening Quality Assurance Protocols

Objective	Activities	Performance Period				How Measured	Responsible Individual <small>(Person appointed by National Manager)</small>
		Oct-Dec	Jan-Mar	Apr-June	July-Sept		
1) Improve the quality of the data reported by the farmer and AgriSafe Nurse	Quarterly review of selected screening forms including: Occupational History form, Clinical form, and health and safety goal sheets.	X	X	X	X	Qual BSC	
	Encourage AgriSafe nurse to review occupational history form with farmer and complete missing items. I-CASH runs analysis on missing data points.				→	Quant	
	AgriSafe clinics required to submit screening forms within two months of completing screenings.				→	Quant	
	Conduct site visits with all clinics to review charts and answer questions.	X				PR	
	Organize screening forms on website for easy access for clinics.	X				BSC	

**Certified Safe Farm Quality Assurance Plan
For Clinical Occupational Health and Wellness Component**

(8.17.16)

Matrix Key:

Performance Period- The performance period is divided into three-month quarters beginning in October.

How Measured- Quant= Quantative Evaluation, Qual= Qualitative Evaluation, BSC= Use of Balanced Scorecard, PR= Peer Review

Objective	Activities	Performance Period				How Measured	Responsible Individual
		Oct-Dec	Jan-Mar	Apr-June	July Sept		
3)Increase the use of PPE among CSF farmers by 50%	Hold PPE Elluminate session for clinics and reviewers	X		X		Qual	
	In partnership with GPCAH, hold respirator training on Nov 17 th for AgriSafe clinics	X				Qual (course eval)	
	Distribute mini business plan for selling ppe, modeled after the Spencer program. Review adoption of business plan by clinics in 2 nd quarter.	X	X			Quant (sales volume)	
	Assure that 100% of reviewers receive PPE goal sheet prior to farm review.					→ Qual	

	I-CASH runs stats comparing number of farmers who need PPE and the ones who actually purchased ppe. Data shared with clinics at Nov. face to face mtg..	X	X	X	X	Quant	
	Monitor sales of PPE 6 months post screening visit.			X		Quant (sales volume)	

Objective	Activities	Performance Period				How Measured	Responsible Individual
		Year 1 – Qtr.					
		Oct-Dec	Jan-Mar	Apr-June	July Sept		
4) Education of farmer/client on occupational hazards/prevention and wellness.	Review with nurses expectations and methods	X		X		Qual	
	Administer before and after quiz	X		X		Quant	
	Review “prescription” sheet	X		X		Qual	
	Follow up to see what was learned/retained/complied with.	X		X		Quant	