# An Educational Program Proposal Submitted to Farm Aid, Inc.

## Su Vida y Salud 'Your Health and Life'

### Rural Safety for Hispanic Families

Developed By:

Southern Illinois University at Carbondale
Office of Economic and Regional Development's
Center for Rural Health and Social Service Development
Robynn R. Nawrot
W. Russell Wright, Ph.D.
Michelle M. Krupp, M.S.
Heather Phemister-Moore

#### I. Purpose

Twenty-two million Hispanics live in the United States. Of this twenty-two million, six million are migrant farm workers and their dependents (Committee on Aging, 1990). The Hispanic population is the second largest minority group, 9.0% of the population, and the fastest growing minority group in the United States. Thirteen percent of the Hispanic population live in rural areas as both migrating and permanent residents.

Today in the United States nearly two-thirds of all injury deaths involve unintentional injuries. Nationwide, injuries are the fourth leading cause of death. They are ranking as the number one cause of death for persons aged 1 to 38 years. Under reported rates for minorities, including Hispanics, are significantly higher than those for non-Hispanic whites. Among the Hispanics, injuries rank as the third leading cause of death, behind heart disease and cancer. Farming and other agricultural industries had the highest death rate of any industry division in 1992. Agricultural injuries resulted in an estimated 140,000 disabling injuries and 1,200 deaths nationwide in 1992. The life expectancy for a male Hispanic farm worker is 49 years compared to 75 years for a non-Hispanic male (National Safety Council, 1993).

Healthy People 2000 Objective 9.1 states a goal to:

Reduce deaths caused by unintentional injuries to no more than 29.3 per 100,000 people. (Age adjusted baseline: 34.5 per 100,000 in 1987).

Reductions in deaths caused by unintentional injuries require preventive educational interventions directed at the leading causes of those injuries.

This paper proposes developing an educational curriculum targeted toward Hispanic farm families in rural areas including migrating and permanent residents. The goal of the injury control intervention is to improve the health and safety of Hispanic farm families by reducing the number of unintentional agricultural-related injuries and death in rural America through injury control education.

The proposed curriculum: Su Vida y Salud - Rural Safety for Hispanic Families, would consist of four independent modules involving the significant causes of unintentional injuries among Hispanic farm families. Each of these modules will educate Hispanic farm families on injury control and the significant causes of unintentional injuries.

Unintentional injury is the number one killer of children and young adults nationwide. Until the rate of these injuries and deaths can be reduced, it remains incumbent upon professionals in the agricultural health and safety field to continue to work together to try to find a culturally sensitive injury control program for Hispanic farm families.

#### Project Background

In October 1992, Illinois Easter Seal Society (IESS) was awarded an outreach grant by the Federal Office of Rural Health (ORHP) for *TASK: Teaching Agricultural Safety to Kids*, a three-year pilot aimed at reducing the number of agricultural-related injuries and deaths among young children living in rural areas. Currently, 12 safety modules are in the final production stage and will be distributed nationally.

The primary goal of TASK is to help people recognize hazards and increase their knowledge of appropriate safety precautions. By implementing agricultural safety programs on an ongoing basis, rural communities can achieve consistent patterns of safe behavior that will keep them safe for a lifetime.

#### II. Partnerships

Southern Illinois University, Carbondale, Office of Economic and Regional Development, Center for Rural Health and Social Service Development is requesting funds from Farm Aid to develop an injury prevention curriculum for Hispanic families residing in rural communities in the United States.

A multi-disciplinary/interagency partnership will be the most effective way to implement the Su Vida y Salud project. We propose the partnership consist of:

• The Center for Rural Health and Social Service Development (CRHSSD) will be responsible for coordinating the Su Vida y Salud project. Robynn Nawrot will serve as co-principal investigator on the project. Ms. Nawrot has served as the curriculum team coordinator for the original three year TASK project and served as project coordinator for the SIUC CRHSSD/Shawnee Health and Development Corporation Migrant Lead Education Project.

Michelle Krupp will serve as curriculum development specialist. She is currently working on the curriculum development for TASK.

• Southern Illinois University School of Medicine will be involved in the partnership. Russell Wright will serve as co-principal investigator on the project. Dr. Wright serves on the CRHSSD Board of Directors, chairing the primary care task force; is a member of the Illinois Rural Health Association Board of Directors and chairs the research committee; and is an active member of the National Rural Health Association research and education constituency. He will work closely with a Hispanic medical student who will be involved in the development of the project.

- Illinois Easter Seals Society (IESS) will participate as a consultant on subject matter. TASK Program Director, Mark Franklin, will serve as an expert on content and as a trainer for the presenters used for the pilot project. IESS President/CEO, Tom Berkshire, currently serves as Illinois Rural Health Association Treasurer. IESS is currently involved in two extensive agriculture injury control and adaption projects.
- To make a balanced team Shawnee Health Service and Development Corporation will be a valuable partner. Since Shawnee has a long history of involvement in Migrant Health Clinics, their understanding with Hispanic cultural sensitivity will be an important asset. Their Executive Director, George O'Neill, has served as President of The Illinois Rural Health Association; Toby Saken, Associate Director of Shawnee Health Corporation and Project Director of Farm workers Health Center in Cobden, Illinois, currently serves on the Illinois Rural Health Association's Board of Directors. Shawnee is a current member of the National Rural Health Association.
- The National Migrant Resource Program, Inc. in Austin Texas will play an important role by distributing the materials. With their extensive migrant health networks, they would be a vital player by disseminating the injury control curriculum nationwide
- Farm Aid would be the final partner in this important project. As the funding agency your name would be associated with all materials developed and disseminated.

#### III. 'Su Vida y Salud' Curriculum

#### Target Audience & Topics

The project will be designed for the "at risk" Hispanic farm workers and families in rural areas. This population encompasses migrant families, and permanent residents. Safety/injury control education for this population is imperative since they may never have had exposure to safety information. In order to best make a decision on what topics to cover and which specific populations to target, the following issues were considered:

#### **Heavy Farm Equipment**

In a depressed economy, it is likely that Hispanic migrant farm workers use old and in need of repair equipment. It is also likely that the purchase of safety devices, such as ROPS and PTO shields are "put on hold". These facts increase the amount of injuries and

fatalities to this population. Since migrant workers and their families use heavy farm equipment, it is imperative for them to learn how to be safe with old and new equipment.

#### Chemical & Pesticide

Chemicals and pesticides are used around the farm and the home often. Hispanic rural families need to become, and remain informed about safe handling of these potential dangers. By learning how to identify chemicals and pesticides, how to avoid injuries, and what to do if someone near you is poisoned; the migrant workers can drastically lower their chances of becoming poisoned.

#### Mechanical Factors

To further understand safety around specific farm equipment, the Mechanical Factors unit focuses on awareness of the dangers of moving parts, such as gears, belts, chains, PTO drivelines, blades, etc. Hispanic farm workers often use machinery with dangerous mechanical factors. Several guidelines or safety rules are included in this unit for the entire family to follow.

#### Rural Recreation

The Rural Recreation unit can help all members of a migrant Hispanic family be safe around the farm and rural areas. The importance of designated play areas where the family can relax and play away from the dangers of the farm operation is stressed. Designated work areas that are too dangerous for recreation, such as places near farm machinery or livestock, storage facilities, etc. are discussed. The whole migrant family can benefit from safety awareness issues in this unit.

With these issues in mind, the four TASK modules were selected to be developed in Spanish and targeted to the entire the family.

These topics were chosen because they cover a broad range of injury control and provide guidelines or actions to prevent injuries and hazards. The general goals for the modules are for the audience to be able to:

- 1. Identify hazards associated with the farm.
- 2. Identify and discuss safe attitudes and proper safety techniques.
- 3. Describe types of injuries common to Hispanic families in rural areas and possible corrective actions.

Each module will be self-contained and will include the following components:

- Introduction to the Module This section will provide guidelines and suggestions on how to present the topic, a preparation checklist, and a summary outline of the unit.
- Presentation Script A verbatim script of the unit will be provided for the leader to easily follow along. The script will also include teaching notes that offer helpful suggestions, highlighted questions that signal when to ask participants questions and generate discussion, and space for the leader's own notes and comments.
- <u>Suggested Quiz</u> An optional pre-test and post-test will be provided to determine presentation effectiveness and learner comprehension level.
- <u>Visual Aids</u> Line drawings as samples will be furnished to help illustrate major points in the presentation script.
- Family Take-Home Packets Master copies of family activities and materials will be provided that will enable participants to transfer their knowledge to a familiar setting.

#### **Ouality Control**

8888

To ensure the modules are culturally sensitive to the Hispanic rural agricultural populations and ensure quality control of the final material, an expert team has been assembled.

Original Contributors: A multi-disciplinary writing team was employed to work with SIUC Center for Rural Health and Social Service Development for the original TASK project. The original TASK project consisted of 12 modules: Heavy Farm Equipment, Safety Around Animals, Storage Facilities, Lawn Mower Safety, Hand and Power Tool Safety, Mechanical Factors, Human Factors, Handling Emergencies, Chemical & Pesticide Safety, Agricultural Signs & Symbols, Personal Protective Equipment, and Recreation on the Farm. Major contributors included:

- Dale O. Ritzel, Ph.D., professor of Health Education at Southern Illinois University at Carbondale
- Jim Legacy, Ph.D., professor of Work Force Education and Agricultural Education at Southern Illinois University at Carbondale
- Jacquelyn King, R.N., Ph.D., Curriculum Development specialist

<u>Developers</u>: In order to properly develop the current TASK modules to meet the needs of the Hispanic rural population, the following people will participate:

- SIU Center for Rural Health and Social Service Development
- A Hispanic medical student from the SIU School of Medicine will contribute efforts to fulfill requirements for honors project
- An Instructional Designer specialist from the department of Curriculum & Instruction
- A Hispanic educator with extensive experience in migrant curriculum development

<u>Reviewers</u>: Before and after the pilot study, modules will be reviewed by, but not limited to the following people:

- Out Reach Education personnel employed by the Shawnee Migrant Health
  Center will be aware of any cultural issues and appropriate translation level
  throughout the modules. In addition, personnel will help with project support
  and presentation.
- A Hispanic community leader from Cobden, (Southern Illinois region).
- TASK Director at IESS, will review an English version for validity of content.

#### Presentation Methods

Each independent module will be designed for a maximum 30-minute presentation. Ideally, a two-person team will deliver the material. Experience has shown that a male/female Spanish-speaking team is most effective in reaching the target audience. Presenters will be familiar with the Hispanic rural culture and have an active role in the community.

In order to reach the Hispanic farm workers and families, a variety of "meeting places" are suggested for location of the presentation. They include:

- 1. Migrant Medical Clinics
- 2. Community Centers
- 3. Day Care Centers
- 4. Migrant Camps



#### 5. Churches

An alternative to the instructor-led teaching method is professional video tapes of the presentations. Four videos will be produced consisting of one unit in Spanish and English. The purpose of this video is twofold:

- 1. To serve as a teaching method in Hispanic rural communities when other resources are unavailable. The video could be viewed in waiting rooms at migrant health clinics, day care centers, or at group presentations by community leaders.
- 2. To serve as a model case (in Spanish and English) for presenters to use as a guidance tool in preparation.

#### **Evaluation**

After development and before final production, several pilot studies will be conducted. A pilot of each module, totaling four different sessions will be held. Participants for the pilots will be the Hispanic rural population in Southern Illinois. Shawnee Migrant Health Clinic will help with coordinating logistics and help with the presentations. The pilots will take place in Cobden, Illinois, in a variety of settings and during different times and dates. Each session will be videotaped for future teaching purposes.

In order to assess presentation effectiveness, two measures will be used.

Observation - Observers will evaluate the pilots using a standard evaluation form. The categories of the evaluation form will include content, delivery, visuals, handouts, and leader-participant interaction.

<u>Pre-test/Post-test</u> - In order to assess participants' existing knowledge of safety, a pre-test will be given at the beginning of the presentation. After the presentation, participants will take a post-test that is similar in level but will have different questions.

Presenters will read each test aloud. Participants will be asked to circle the best answer that will be depicted in graphic format (rather than words). Scores of both tests will be compared to help determine whether participants understood the material.

Evaluation data will be recorded, and appropriate changes will be made to the modules prior to final production.

#### Final Product & Distribution

After several pilot studies have been conducted, a final product for dissemination will be compiled. The product will be packaged to include the following:

- Four agricultural safety units, in English and Spanish, complete with introduction to module, script, visual aid samples, suggested quiz, and master copies of Family Take-Home Activities.
- Professional videotapes consisting of the presentations of the four units in Spanish and English for presenters to use as an alternative teaching method.
- Suggested marketing strategies that will include ideas for publicity within the Hispanic community; sample flyers, brochures, and letters; and suggested incentives to draw the target audience to the presentations.

The National Migrant Resource Program, Inc. will nationally distribute the final product to migrant health care centers and other outlets of The Hispanic rural population.

#### IV. Outcomes

The anticipated outcome of the Su Vida y Salud project is to enhance the health and safety of rural Hispanic families through direct educational opportunities. To achieve this goal we intend to meet the following criteria:

- To create a comprehensive, injury control education package to serve as a teaching model for the rural Hispanic population.
- 2. To improve the safety of rural Hispanic families by providing them a four-unit injury control curriculum and giving them the opportunity to become partners in a family commitment to safety.
- Since the National Migrant Resource Program, Inc has access to Hispanic networks and is committed in assisting the migrant health educational needs of this population, national distribution of the injury control curriculum will be easily achieved.



#### V. Proposed Project Time Line

January

Hire staff

Begin development/revisions of curriculum

February:

Continue development of curriculum in English

March:

Complete English versions of curriculum

April:

Begin development of the Spanish version of the curriculum

May:

Complete first draft of Spanish version

June:

Have experts review Spanish version

Begin marketing plan (how to create interest in attending

pilot/presentation)

July:

Organize pilot sights

Complete Spanish presentation

August:

Present curriculum (pilot test)

September:

Finish pilot

Review pilot information

Make revisions on curriculum per pilot information

October:

Begin Video

November:

Finish video production

December:

Write final report on project

#### Heavy Farm Equipment:

In a depressed economy, it is likely that Hispanic migrant farm workers use old and in need of repair equipment. It is also likely that the purchase of safety devices, such as ROPS and PTO shields are "put on hold". These facts increase the amount of injuries and fatalities to this population. Since, migrant workers and their families use heavy farm machinery, it is imperative for them to learn how to be safe with old and new equipment.

#### Chemical & Pesticide Safety

Chemicals and pesticides are used around the farm and the home often. Hispanic rural families need to become, and remained informed about safe handling of these potential dangers. By learning how to identify chemicals and pesticides, how to avoid injuries, and what to do if someone near you is poisoned; the migrant workers can drastically lower their chances of becoming poisoned.

#### Mechanical Factors

To further understand safety around specific farm equipment, the Mechanical Factors unit focuses on awareness of the dangers of moving parts, such as gears, belts, chains, PTO drivelines, blades, etc. Hispanic migrant workers often use machinery with dangerous mechanical factors. Several guidelines or safety rules are included in this unit for the entire family to follow.

#### **Rural Recreation**

The Rural Recreation unit can help all members of a migrant Hispanic family be safe around the farm and rural areas. The importance of designated play areas where the family can relax and play away from the dangers of the farm operation is stressed. Designated work areas that are too dangerous for recreation, such as places near farm machinery or livestock, storage facilities, etc. are discussed. The whole migrant family can benefit from safety awareness issues in this unit.