

CD/4H PROJECT ABSTRACT

Youth living and working in agriculture are exposed to an occupational environment that is widely recognized as one of the most hazardous. Recent surveillance statistics indicate that there were over 22,000 injuries to youth under age 20 in this environment during 2001. Thirty-one % of these injured youth were under age 10; 46% were ages 10-15; the highest rate of injury (15.7 per 100 youth) was to those youth who were part of a farm household (NASS, 2004). Healthy People 2010 (2000) identified the need for research based prevention efforts to reduce the burden of those injured on the job, the primary goal of this project.

Over the past three years the research team has successfully developed and formatively evaluated a prototype agricultural health and safety CD for 4-H youth grades 3-6 in PHS Region VIII. The interactive CD (4-H CD1) contains five teaching modules addressing safety issues related to tractors, chemical handling, animal handling, ATVs and grain handling. Each module includes 2-3 video clips, safety facts and an embedded quiz with immediate reinforcement identifying correct or incorrect answers.

This proposal seeks to evaluate the effectiveness of the 4-H CD1 in three additional diverse agricultural production regions of the U.S. Working with coordinators from three Agricultural Centers representing the northeast, southwest and southeast regions of the country, the researchers will test for both knowledge and behavioral change. A panel of parents, children & 4-H leaders, developed by each Center coordinator, will assist the researchers to assess appropriateness of 4-H CD1 for their region; and to identify new topics for 4-5 additional teaching modules. An Advisory Team made up of regional coordinators, subject matter experts, and the High Plains Intermountain Center researchers will assist with all aspects of the 4-year project including: 4-H access, data collection, regional panel development, final selection of new teaching module topics, and development and formative evaluation of the second CD (4-H CD2).

The six aims of this proposal are to: 1) Evaluate the impact of an interactive computer based agricultural health and safety education intervention (4-H CD1) using group randomized design in 3 different agricultural regions of the U.S. (N=360) 2) Assess how well the content of the existing 4-H CD1 meets the needs of youth and families in three different agricultural regions of the U.S. 3) Identify additional teaching modules (or modifications of current modules) needed based upon feedback from 3 regional panels. 4) Based upon the needs identified in Specific Aim 3, develop and formatively evaluate a second agricultural health and safety educational CD (4-H CD2) to meet the needs of a broader national audience. 5) Develop, with the Advisory Team, a dissemination plan of the 2 CD's through 4-H, HICAHS translation project and other appropriate venues.