



# **AGRICULTURAL HEALTH AND SAFETY EDUCATION AT NSAC: CHANGING THE BEHAVIOUR OF FARM YOUTH**

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# Outline

- Research objectives
- Overview of results of research project
- Development and evaluation of web-based courses
- Preview of courses

## WHIRC – Women’s Health in Rural Communities

- **Research team – Nova Scotia Agricultural College and Dalhousie University**
- **CIHR NET grant – five years**
- **Target group - young rural women – 19 – 39**
- **Four themes: mental and emotional health, rural safety, community resiliency and sustainability, nutrition**

# CASA Project

- Developed 4 modules for a certificate in Farm Health and Safety
- Two year diploma program- Diploma in Enterprise Management
- Required as part of Workplace Safety courses



# Objectives

- **To ensure graduating students have an understanding of farm safety and health issues**
- **To examine how knowledge of corrective and preventive practices is transferred**
- **To understand what factors impact safety behaviour including parental influence and gender**
- **To develop and evaluate an online degree credit course and a farm safety management certificate**
- **To develop effective ways to change behaviour and make life on the farm healthier and safer**

# Methodology of Research Project

- **Pilot study**
- **Two step process**
  - **37 page questionnaire**
  - **Face to face interviews**
- **Solicited students on NSAC campus in March 2006**
- **Conducted 26 interviews (9 females)**
- **Qualitative analysis of interviews**



# Conclusions from Project

- **Family culture had impact on attitude toward safety practice, particularly if injured.**
- **Indicated fathers were more important influence and did the training: training ranged from minimal to formal**
- **Limited use of protective measures**
- **Farm acknowledged as dangerous place but not reflected in safe practice – culture of safety**



# Web-based Courses

- **Recognition of need to provide instruction tailored for farm youth at NSAC**
- **3<sup>rd</sup> year level degree online course**
- **Diploma level – online Farm Health and Safety Management certificate**
- **Format: Self Directed Learning, Assignments, Discussion Forums and Tests**



# Objectives of Degree Credit Course

- To develop awareness of injury and disease trends
- To study key risk factors and behaviours
- To further understanding of the impact of farm culture and tradition on safety and health behaviour
- To explain health promotion theories and their application to research in farm health and safety
- To discuss the role of 3 E's in improving injury and illness statistics

# Module Contents - degree

- Module 1: Issues in Agricultural Health & Safety
- Module 2: Models of Health Behaviour Change
- Module 3: Management & Farm Health and Safety
- Module 4: Agricultural Machinery
- Module 5: Agricultural Chemicals
- Module 6: Safe Livestock Handling
- Module 7: Occupational Health
- Module 8: Agricultural Family Dynamics
- Module 9: Risk Taking and Safety Culture
- Module 10: Improving Agricultural Health and Safety



# Module: Agricultural Family Dynamics

## 2.2 Child Development:

**Farm incidents to children are not random; they are predictable..... As you read in the “Bubble Kid” article, most parents believe that their children well enough to determine what farm work activities are safe to assign regardless of age, size, or gender. While well-intentioned, parental estimations of their children’s capabilities may not be firmly grounded in reality. They may not recognize fundamental benchmarks indicating when physical, mental and emotional factors coalesce to assure a child’s true readiness for certain farm work assignments.**

# Sample Assignment:

## Reading:

Visit the NAGCAT website and view the NAGCAT presentation, available from <http://www.marshfieldclinic.org/ldf/slides.exe>.

Then, review the following NAGCAT guidelines for common tasks assigned to children to get an idea of the process involved in deciding whether a child is ready to perform the following tasks:

- Feeding Hay to Cow
- Picking Rocks
- Raking Hay

# Issues in Agricultural Health and Safety

- **Piloted over summer**
- **Offer this winter**
- **Asking students to participate in research project – measure extent of learning and willingness to change behaviour**
- **Pre and post interview plus 6 mth's later**
- **Issues with Ethics Board**



# Farm Health & Safety Management Certificate

## The Modules:

- Threaded Module on Farm Safety Audits - use of risk management tool
- Farm Safety Management - responsibilities related to provincial OH&S acts, and the tools available to manage farm safety risks
- Safe Livestock Handling - implementing safe handling procedures

# Modules – cont'd

- Occupational Health - other health hazards present on farm operations and identifies strategies for minimizing the risks
- Tractor and Equipment Safety - identifies tractor and equipment hazards and covers the basics of safe tractor and equipment operation
- All modules emphasize the role of manager in improving the health and safety climate on their operation.



# Certificate

- Piloted in winter of 2007 with dairy and farming students
- Beside evaluation of learning, plan to assess impact on home operation in 2008
- Piloting a equine safety course this winter

# Conclusions

- Incorporation of agricultural health and safety in curriculum in both degree and diploma programs
- Need to determine if effective in changing behaviour of farm youth
- Plan to expand on initial research to study safety culture on farms