Interacting with Employers to Enhance Child and Youth Safety in Agriculture

Barbara C. Lee, RN, PhD
National Children’s Center for Rural & Agricultural Health & Safety

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“Your lab work is back. I'm afraid farming is in your blood.”
I. Background
   A. National Children’s Center
   B. Data: Child Ag Injuries/Fatalities

II. Child Ag Safety Interventions
   A. Guidelines for Work
   B. Guidance for Play, Child Care

III. Case Studies

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Our Center

National Farm Medicine Center

- 1981 - NFMC formally established
- 1997 - National Children’s Center funded
- 2005 - Home of *Jnl Agromedicine*
- 2012 - Partnered with UMASH
- 2019 – Largest US agromedicine center
About NCCRAHS

- Injury data
- Consensus development of guidelines (work, play, media)
- Intervention testing/evaluation
- Knowledge mobilization
About NCCRAHS

• Partnerships

• Leadership

• Advocacy
FACTS:

• About 2 million farms in U.S.
• About 900,000 youth live on farms of these, 51% work on their farms
• > 265,000 youth hired to work in agriculture
• About 24 million youth visit on farms
Occupational Fatalities to Young Workers less than 18 years of age in the US, 2001-2015

- Agricultural Production
- All other industries
Agents of Injury/Fatality

Fatalities
1. Tractors
2. Vehicles, machinery (includes ATVs)
3. Drowning/Asphyxiation
4. Structures, surfaces – falls from
5. Livestock

Non-fatal injuries
1. Structures, surfaces, vehicles – falls from
2. Machinery entanglements, cuts, etc.
3. Livestock
Quick Stats

FACTS Re: Child (0-17) Agricultural Injuries

• Youth working on farms are 45x more likely to die at work than youth at other jobs
• Tractors account for >50% fatalities
• > 60% youth injured on farms are NOT working
• Nearly all non-working child were “supervised”
• Cost >$1 billion/year with 26% medical bills
Mechanism tears arm from teenager changing irrigation wheel-line at ranch field near Crane
Calm courage and clear thinking sends the boy for help

Toddler drowns in farm's stock tank
SEYMOUR, Mo. (AP) - A 19-month-old boy drowned after falling into a stock tank containing about two feet of water on his family's Webster County farm.

Edgar youth claims young lives
Midwestern farms prove annually dangerous

Child has arm amputated in farm accident
FRANKLIN (AP) - A 4-year-old girl was hospitalized in fair condition Wednesday after an arm became caught in a corn chopper, police said.

Neillsville boy, 12, killed in tragic farm accident
On Friday, August 4 Justin Kunze, age 13, died as a result of injuries suffered in a tragic accident at the family farm in the Town of Hull.

Boy killed in tragic farm accident
WEST BEND, Oct. 21 - A 9-year-old boy was killed when his arm was severed in a farming accident.

News Briefs
Boy injured in farm accident
WEST BEND, Oct. 21 - According to the Washington County Sheriff's Department report of the incident, the 9-year-old boy was operating a tractor when he was injured.

3-year-old listed as critical after surgery to reattach his arm
A 3-year-old boy who was injured in a farm accident was listed as critical after surgery to reattach his arm.

Girl dies in tractor accident
TOWN OF SEMMERT - A 19-year-old girl died and two others were seriously injured Tuesday when a tractor they were using to cut hay overturned and pinned some of the victims.
Accident

Injury Incident
E’s of Injury Prevention

• Education
• Engineering (remove the hazard)
• Enforcement (regulations/policies)

• Enlighten through the media
• Environmental change (social expectations, normative behavior)
• Economic incentives
Guidance for Youth Work

AGRICULTURAL YOUTH WORK GUIDELINES

- Voluntary guidelines
- Used by supervisors/parents
- Assign tasks based on ability
- Mobile friendly website
  - Interactive
  - Read
  - Download
  - Print

Operating a Tractor

Can youth do this job safely?

Youth must be able to do have all of the following to perform this job safely:
- Reach and operate controls while wearing a seatbelt
- Strength to repeatedly operate controls
- Tall enough for good field of vision when seated on tractor
- Understand and consistently repeat a 10-step process
- Recognize a hazard, problem solve, and respond appropriately
- React quickly to hazards
- Mature enough to consistently do what is expected
- Think through actions and consequences before acting
- Avoid loose clothing, clothes with strings, tie back long hair
- Comply with the working outdoors guideline
- Safely demonstrate the job 4 to 5 times
- Maintain two-way communication link

Adult Responsibilities
- Ensure tractor is mechanically sound and safety features are in place, including ROPS
- Review developmental guidelines to verify youth’s ability to operate tractor
- Demonstrate how to safely drive tractor
- Provide appropriate training
- Educate youth to mount tractor using 3 points of contact
- Ensure work area is free from as many hazards as possible
- Educate youth on avoiding/dressing remaining hazards
- Educate youth on not operate tractor after dark/in bad weather
- Train youth to call an adult if equipment malfunctions

Supervision

Note: Ensure tractor is sized appropriately for youth. Youth must be 16+ years to drive an articulated tractor. See Tractor Operations Chart for guidance.

14-15 years
- Intermittent supervision progressing to periodic
- 16+ years
- Periodic supervision

Hazards
- High speed
- Ground-level objects
- Roll-over
- Collison with objects
- Electric shock
- Noise
- Operators’ manual
- Hearing protection (if needed)
- Respiratory protection (if needed)

Protective Strategies
- Head protection
- Safety glasses
- Non-slip shoes
- Operators’ manual
- Hearing protection (if needed)
- Respiratory protection (if needed)

www.cultivatesafety.org
Model Policy: Youth Employment in Agriculture

Background

Agricultural operations are hazardous by nature and special protections need to be in place, such as adequate supervision, occupational health and safety, and developmental level of the learner, and consistent provision of safe and valuable introductory work opportunities. In many cases, farm work may provide valuable opportunities available for adolescents. These early experiences are motivating for young people to seek a career in farming, food processing, food marketing, land management, and other related fields. Positive early work experiences, hands-on opportunities, and robust post-secondary education programs will lead to the future of American agriculture and continued food supply.

- Appropriate-age appropriate agricultural work opportunities with physical, cognitive, and emotional abilities should be developed to protect children from hazards found in specific jobs, locations, and work experiences. The National Council of Agricultural Education and the Association of Agricultural Education also has a 2016 "Youth Policies in U.S. Agriculture" report which provides guidance for developing policies that will ensure safety and health for children.

Job Assignments: General

- All farms that intend to employ youth should implement a formal worksite hazard assessment program, including regularly updated safety checklists, accident prevention programs, and regular review of health and safety procedures to ensure they are current with existing requirements and recommendations.
- All manufacturer directions/manuals and applicable local, state, and federal laws and regulations must be followed. This includes, but is not limited to, those with age, size, training and certification requirements.
- Job assignments for 14- and 15-year-olds should occur in non-hazardous work only. Work conditions should include specific protections relative to livestock, machinery, and crop control products, and with written parental consent. There should be assurances that schooling is not disrupted.
- There should be increased but still limited employment opportunities for 16- and 17-year-old youth with restrictions on performing hazardous work activities. These activities can be expanded for those enrolled in approved technical or vocational programs such as FFA or other work-based learning programs, in which instruction in the use of powered equipment and safe work practices around livestock is provided, tested, and certified. Written parental consent must also be obtained.
- Those under age 18 should not be the onsite/in-field designated "responsible" party for farm workplace safety (unless specifically trained/certified as an emergency first-aid responder).
- Noise exposure is a recognized hazard in farming and as such, youth should be provided with appropriate hearing protection and training in hearing conservation strategies (i.e., walk away, turn it down, or wear protection).

Voluntary Guidelines for Youth Employment

These voluntary guidelines pertain to hired adolescent workers ages 14 to 17 years.

Training and Supervision

- Youth under the age of 18 should always work under direct visual supervision (close proximity) of at least one responsible adult supervisor who is physically present at the worksite/location.
- Training for young hired workers should include clear communication and documentation of the allowed and prohibited work activity in and around the workplace, as well as the rights and responsibilities for themselves and others in the work environment.
- Training for all supervisors of hired workers under 18 should include instruction on:
  - Existing age-based work rules
  - Physical and cognitive abilities of youth
  - Need for extra supervision and frequent training
  - Basic emergency response practices, both general and specific to the workplace
  - Harassment prevention, including sexual harassment

Introduction

There remains a misconception that young workers are not only prevalent in US domestic agricultural production, but are a necessary component of the agricultural workforce. Yet, in reality, the predominant practice among many growers and producers is to avoid hiring adolescents under age 18 and prohibit children from being brought into the fields by their parents. According to data in 2012, there were 258,835 youths less than 20 years of age hired directly by the farm operator. A 2007 survey of 334 agricultural employers with labor-intensive crops confirmed that more than half had no intentions of hiring adolescents for agricultural work in the near future, citing concerns about too many regulations as their justification for this stance. Responses were analyzed to identify patterns and trends.
Guidance for Non-Working

Off-farm Child Care

Safe Play Areas on Farms

• Interactive Website
• Hands-on Demonstrations

Agritourism Safety

• Walk-throughs, Policies
• www.safeagritourism.com
Boy, 3, dies in Clark County farming accident
**Case Study 1**

**Fatal Work-Related** - May, 2017, Clark County, WI

- Mother and 4 sons (3-8 yrs.) picking rock, using skid steer to pick & transfer rocks
- 5 yr. old operating skid steer
- 3 yr. old carrying rocks into bucket - crushed
- Contributing factors

**Prevention** - Education, Engineering, Policy ?

**Penalty** - Social Services, Farm Safety Audit
Case Study 2

Non-fatal Working

- 6 yr. old
- De-gloved leg in hydraulic bucket
- Father present
- Other brothers’ close calls
- Lifetime medical issues
- Media coverage

Prevention – Education, Engineering, Policy?
Penalty – No legal penalties; but tremendous costs
Cortland County farm owner pleads guilty to child labor violations after teen's death

Fatal, Work Related, upstate New York, Oct. 2018

- 14 yr. old working on neighbor’s farm
- Worked 60 hrs./week; paid “off the books”
- No workers compensation
- Was found crushed under heavy equipment

**Prevention** – Education, Engineering, Policy?

**Penalty** – 60 days jail, 3 yrs. probation, $10,500
Case Study 4

Prevention – Education, Engineering, Policy?

Penalty: Child Abuse/Negligence review

Toddler Killed In 'Tractor Incident,' Sheriff Says

A 2-year-old was killed in rural Clackamas County over the weekend. Law enforcement has not identified anyone involved.

By Travis Loose, Patch

ESTACADA, OR — A 2-year-old boy was killed over the weekend in what Clackamas County Sheriff's deputies described as a "tractor incident" in a rural farm area between Oregon City and Estacada. Law enforcement has not released the identities of anyone involved.

The sheriff's office was dispatched to the 20000-block of South Mattoon Road, west of Estacada, just before 10 a.m. Sept. 29. When first responders arrived, they reportedly learned the boy sustained fatal injuries during an incident involving a tractor on the property.

The Clackamas County Sheriff's Office Child Abuse Team is reportedly investigating.
Case Studies Findings

The “Es” of Injury Prevention - Findings

• **Education** - limited impact on behaviors

• **Engineering (removing the hazard)**
  - limited impact on exposure of young children

• **Enforcement (regulations/policies)**
  - Application of child labor laws
  - Voluntary company, business policies
  - Civil penalties
Paradigm Shift

• Decrease emphasis on basic, etiologic research
• Increase emphasis on priority issues
• Accept limitations of evidence-based interventions
• Engage spheres of influence
Socio-Ecologic Model

- Introduced in 1970s with many updates
- Used by WHO, CDC, many organizations
- Depicts multiple dimensions and complex human interactions to influence human behaviors
Definitions

Policy: Federal/state regulations with enforcement such as child labor restrictions, workers compensation, immigration, OSHA rules

Institution/Organization: Corporations, national organizations, agencies that set standards and protocols for their trade agreements, employees and members.

Community: Childcare centers, schools, churches, media, advocacy groups and community-level organizations such as farm cooperatives or FFA chapters.

Interpersonal: Persons with close relationships to the immediate family such as relatives, friends, healthcare providers, or peer groups.

Adult: Parent, guardian, farm owner, employer, other individual who bears primary responsibility for a child living, visiting, or working on an agricultural production site.

Child: An individual 0-18 years-of-age who lives on, visits, or is hired to work in an agricultural production site.
What Employers Want

Research – Child Care Services

• Survey research
• Theory of Planned Behavior
• 50-item instrument (paper)
  • 5-pt. Likert scales
• Subjects = attendees of ag-business conferences
  • Las Vegas Ag Labor Forum (Dec. ‘15)
  • APMA – Monterey, CA (Jan. ‘16)
Agricultural Employers, HR Directors (n=102) want:

• No children in worksite
• Improve employee morale
• Retain high-skilled workers
• Increase available work hours
• Enhance company reputation
• Increase female workforce
• Reduce worker distraction

Challenges w/ Employers

- Gaining entry into the conversation with person(s) in position to influence change
- Gaining trust, confidence
- Sharing passion for safety
- Overcoming suspicion: OSHA, fines, negative media
- Business requests easy, quick programs
- Accessibility of relevant interventions
- Addressing “agricultural privileges”
- Culturally relevant options for employees
Opportunities w/ Employers

AGROBUSINESS TRENDS

• Growing agricultural enterprises – global trade, increased “business” focus
• Trends: more common safety, risk managers
• Corporate Social Responsibility
• “Be Safe | Be Profitable” campaigns
• Big Box retailers’ audits, expectations
• Vertical integration of safety policies
• Marketing employment opportunities to attract shrinking labor pool
BUILDING PARTNERSHIPS

• Understand past “bad blood” and commit to moving forward
• Identify a champion (individual/company)
• Build a team - Examples:
  • Idaho Dairyman’s
  • RCMA w Florida F&V
  • Fire Fighters’ Assn.
BUILDING PARTNERSHIPS (cont.)

- Conduct needs assessment
- Plan and pilot test a program
- Facilitate corporate funding (w/ match)
- Assess progress, evaluate
- Share the stories
- Garner media coverage
- Applaud/share success
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Our Core Staff

Kate Barnes
Casper Bendixsen
Marie Fleisner
Scott Heiberger
Kyle Koshalek
Barbara Lee
Barbara Marlenga

Melissa Ploeckelman
Emily Redmond
Josie Rudolph
Marsha Salzwedel
Kathie Smith
Erin Teague
Bryan Weichelt

Our Collaborators