

Working Safely on Farms



Maximizing the benefits while
reducing the risks

Objectives

- Discuss the benefits of working on a farm
- Explore the challenges/risks to working on farms
- Contrast the risk to youth working in agriculture with other occupations
- Discuss strategies for addressing these challenges and risks
- Determine how to balance the risks and benefits

The Numbers

- ~893,000 children live on farms
- More than half of them work on the farm
- Over 265,000 hired youth work on farms
(non-resident)

Perceived benefits

- Instills a passion, love and respect for land
- Lifelong friendships
- Work/bond with family
- Teaches about the life/death cycle
- Builds character
- Instills a good work ethic
- Teaches responsibility
- Better health
- Lots of room for kids to play
- Have the best pets

Challenges/Risks

- Injury/death
- Keeping friends/visitors safe
- Child care
- Creating fun
- Isolation
- Instilling a love for farming – safely
- Keeping family in harmony
- Young workers

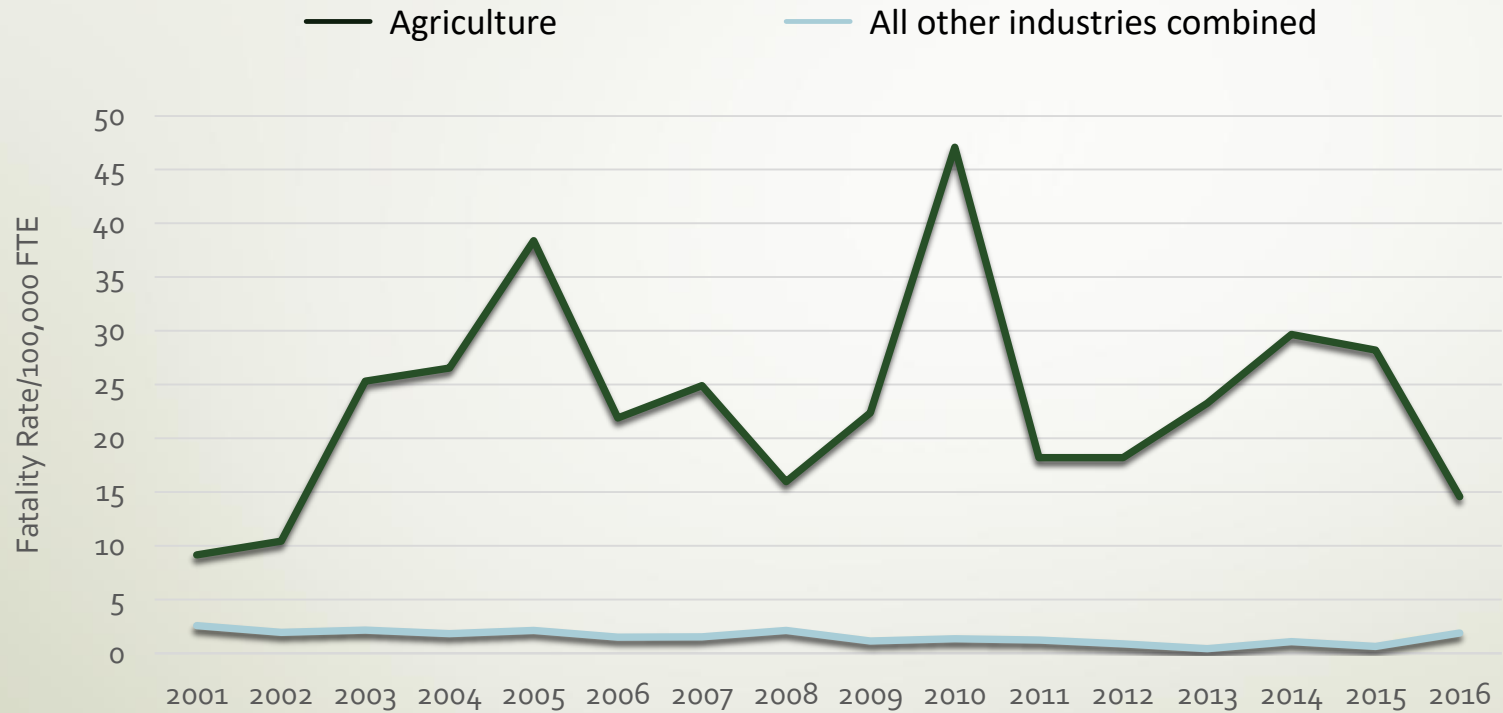
Young Workers

- Have less experience
- Engage in risky behavior
- Influenced by peers
- Don't often "speak up"
- Behaviors off the job can impact safety (sleep, emotional health, substance abuse, etc.)



Working Youth

Fatality Rates in Agriculture vs All Other Industries, 2001-2016



Source: Fatal injury totals were generated by NIOSH researchers with restricted access to the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI) microdata; additional information at www.bls.gov/iif/oshcfoi1.htm

Working Youth Injuries/Fatalities

Transportation incidents


Causes:



Machinery



Motor Vehicles



**How can we address these
challenges and risks?**

Top 5 Injury Statistics:

A child dies in an agriculture-related incident about every 3 days

Every day, about 33 children are injured in an agriculture-related incident

Agriculture is one of the most dangerous occupations in our nation, and the only worksite in the U.S. where children of any age can be present.

The number of ag-related youth worker fatalities is higher than all other industries combined.

Many agricultural work-related injuries and deaths are associated with children doing work that does not match their developmental level

60% of child ag-related injuries happen to children who are not working

Youth Working in Agriculture

- Work at **younger ages** & in more **hazardous** jobs
- **Developing bodies** → coordination, balance, reach
- **Developing brains** → attention span, impulse control, decision making
- **Fatigue, substance use, and distracted behaviors**



What's in a number (age)?

Despite the designation of age 18 as an adult by legal standards in many jurisdictions, there is nothing magical about this age in terms of psychological and physical development. We know that the human body, especially the brain, continues to develop and mature up to age 25, and sometimes beyond.

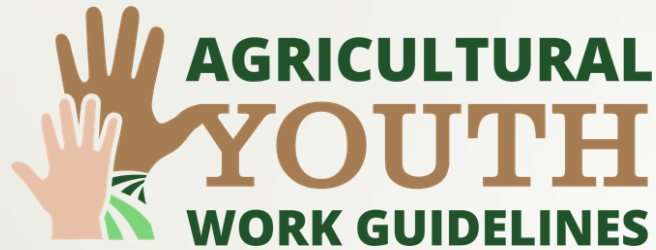
David Schwebel, PhD

*Child Development Specialist, Professor of Psychology
University of Alabama – Birmingham*

Before Assigning Work

- Assess the worker's ability to perform the task, regardless of their age.
- Assessment includes, but is not limited to
 - physical and cognitive abilities
 - experience with similar or precursor tasks
 - successful demonstration of current task 4-5 times under supervision
- Supervisors must also provide training, supervision and enforce policies.

Working Youth




- 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

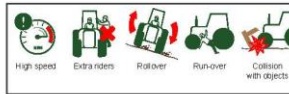
- Ensure tractor is mechanically sound and safety features are in place, including ROPS
- Review [developmental guidelines](#) to verify youth's ability to operate tractor
- Demonstrate how to safely drive tractor
- Provide appropriate training
- Educate youth to mount tractor using 3 points of contact
- Ensure work area is free from as many hazards as possible
- Educate youth on avoiding/addressing remaining hazards
- Ensure youth does 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



Protective Strategies



<https://doi.org/10.21608/nrcr.arts.youthwork.operatortractor.2017>

Ability

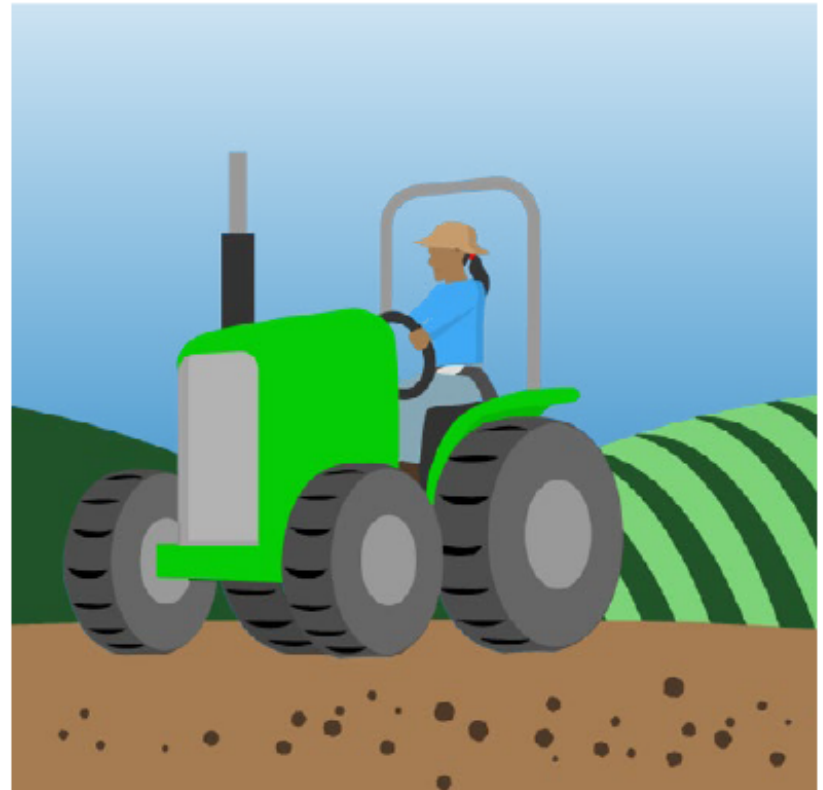


Operating a Tractor

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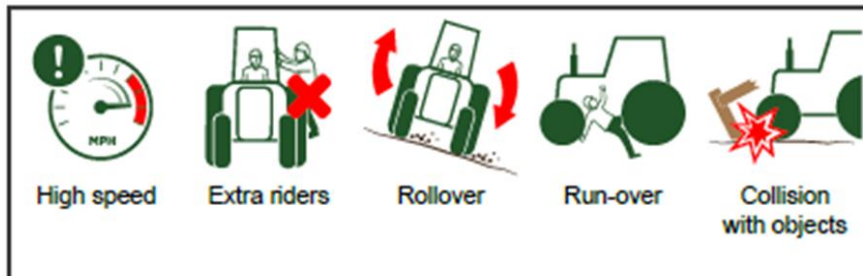
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Protective Strategies



Printing & Customizing

Operating a Tractor

[Back To Full Guideline](#)

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DOI: <https://doi.org/10.21838/nfmc.nccrahs.youthwork.operatetractor.g.2017>

PDF Options

Select a PDF skin tone, and then the equipment color. Then download or print the PDF that previews on the left.

Skin Tone

Light

Equipment Color

Red

Download

Print

Description

Work guideline to help adults protect and supervise youth while operating a tractor.

Related Resources




Hired Youth

Safety Guidelines for Hired Adolescent Farm Workers

- Training tip sheets
- Safety posters
 - Work conditions
 - Teen characteristics
 - Training & supervision info
 - Fair Labor Standards Act
 - Hazards
 - Things to remember
- English & Spanish

Hand Harvesting Fruit and Vegetables



Main Hazards

- Sharp Tools
- Sun Exposure
- Repetitive Motion

Remember

- Proper Body Movement
- Non-skid Shoes
- Good Handwashing

Supervisor responsibilities

Work conditions

- Provide safe transport to field
- Ensure reentry standards are followed
- Allow for rest in shaded areas
- Provide toilet facilities and water for drinking and washing hands
- Allow 10-minute break every hour
- Maintain a communication link

Teen assessment

- Be aware of insect allergies or medical conditions
- Can repeat task for 50 minutes without becoming exhausted
- Has positive safety attitude
- Can easily carry 15 percent of body weight
- Is able to bend and lift using proper body mechanics

Training and supervision

- Train employees on safe bending and lifting practices
- 1. Keep back as straight as possible
- 2. Shift weight from foot to foot
- 3. Stand with feet shoulder-width apart; one foot in front of other
- 4. Hold in stomach muscles
- 5. Shift from leg-to-leg when squatting
- 6. Avoid twisting to reach objects
- 7. Shift body position often
- Train employee in safe cutting
- 1. Use the right tool for the job
- 2. Don't use a tool that is oily, greasy or too heavy to handle
- 3. Plant feet firmly
- 4. Cut away from body
- 5. Keep wrist straight

Federal Regulations: Fair Labor Standards Act (FLSA)

- Refer to Adolescents at Work guideline for general regulations.
- Find state-specific information at www.dhs.gov/eis/vvt/ohsa
- Youth under 16 may not apply toxic agricultural chemicals (including cleaning or decontaminating equipment, disposal or return of empty containers, or serve as a flagger for aircraft applying such chemicals).
- Youth under 16 may not operate or assist with (including starting, stopping, adjusting, feeding, or any other activity involving physical contact associated with the operation) power-driven circular, band, or chain saw.
- Youth under 16 may not work to load or unload timber with a butt diameter of more than 6 inches; or fell, buck, or skid timber.

www.msnfieldlab.org/ncraifu/ 1-800-642-6900 • Harvested, WI NIOSH Grant #5-U55-OH008807

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Safety Guidelines
Hired Adolescent Farm Workers

Regulatory Agencies in Ag

- The Occupational Safety and Health Administration
- The Environmental Protection Agency
- State Codes: Department of Transportation
- Code of Federal Regulations
 - 29CFR1928.51 and 29CFR1928.57
- Department of Labor
 - Hazardous Occupations Order in Agriculture



Transportation.gov
U.S. Department of Transportation

Hazardous Occupations Orders in Agriculture (HOOA)

- In 1968, U.S. Department of Labor declared eleven agricultural tasks too hazardous for youth younger than 16.
- The law does not apply to youth younger than age 16 who are employed, either with or without compensation, by their parents or legal guardian.
- 14 & 15 year olds can be exempt from certain portions of the law. This exemption applies to agricultural tractors & specific types of farm machinery.

AgHO's: 11 Hazardous Tasks

1. TRACTOR - Operating a tractor of over 20 PTO horsepower, or connecting an implement or any of its parts to or disconnecting it from such a tractor.

2. GENERAL MACHINERY - Operating or assisting to operate (including starting, stopping, adjusting, feeding, or any other activity involving physical contact associated with the operation) any of the following machines: corn picker, cotton picker, grain combine, hay mower, forage harvester, hay baler, potato digger, mobile pea viner, feed grinder, crop dryer, forage blower, auger conveyor, the unloading mechanism of a nongravity-type self-unloading wagon or trailer, power post-hole digger, power post driver, or nonwalking rotary tiller.

3. SPECIALIZED MACHINERY - Operating or assisting to operate (including starting, stopping, adjusting, feeding, or any other activity involving physical contact associated with the operation) any of the following machines: trencher or earthmoving equipment; fork lift; potato combine; or power-driven circular, band, or chain saw.

4. LIVESTOCK - Working on a farm in a yard, pen, or stall occupied by a bull, boar, or stud horse maintained for breeding purposes; a sow with suckling pigs; or cow with newborn calf (with umbilical cord present).

5. WOODLOT - Felling, bucking, skidding, loading, or unloading timber with a butt diameter of more than 6 inches.

6. LADDER and SCAFFOLD - Working from a ladder or scaffold (painting, repairing, or building structures, pruning trees, picking fruit, etc.) at a height of over 20 feet.

7. TRANSPORT - Driving a bus, truck, or automobile when transporting passengers, or riding on a tractor as a passenger or helper.

8. TOXIC ATMOSPHERE - Working inside fruit, forage, or grain storage designed to retain an oxygen deficient or toxic atmosphere; an upright silo within two weeks after silage has been added or when a top unloading device is in operating position; a manure pit; or a horizontal silo while operating a tractor for packing purposes.

9. CHEMICALS - Handling or applying (including cleaning or decontaminating equipment, disposal or return of empty containers, or serving as a flagman for aircraft applying) agricultural chemicals classified under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135 et seq.) as Category I of toxicity identified by the word "poison" and the "skull and crossbones" on the label or as Category II of toxicity, identified by the word "warning" on the label.

10. BLASTING - Handling or using a blasting agent, including but not limited to, dynamite, black powder, sensitized ammonium nitrate, blasting caps, and primer cord.

11. FERTILIZERS - Transporting, transferring, or applying anhydrous ammonia.



**AGRICULTURAL WORK CLASSIFIED AS
HAZARDOUS**

LEARN MORE AT:
www.agsafety4youth.info

AgHO's Penalties



- Penalties can be strict if youth are subjected to hazardous occupations.
- Youth are not penalized for the infractions, but the employer can be.
- The penalty to the employer for the first offense can be up to a \$10,000 fine for a willful violation.
- For a second offense, up to a \$10,000 fine and/or imprisonment for not more than six months can be assessed.

AgHO's Exemptions

- Minors working on a farm owned or operated by a parent or legal guardian
- Minors 14 or 15 years of age completing a tractor and machinery certification program
 - Exempt for tasks 1 & 2
 - 4-H Extension program
 - Vocational / Ag Science program
- Student learner enrolled in an Ag Science classroom working as an apprentice under a written agreement with the ag employer
 - Exempt for tasks 1 – 6

Model Policy

- Background
- Details of policy
- Info on development
- Guidance for adapting policy

Updated 6.17.14



Model Policy: Youth Employment in Agriculture

Background

Agricultural operations are hazardous by nature and special protections need to be in place to protect youth and untrained workers from the hazards found in specific jobs, locations, and practices. With proper job training, adequate supervision, occupational health and safety education appropriate for the age and developmental level of the learner, and consistent enforcement of work rules, farm work can provide safe and valuable introductory work experiences, and important income opportunities. In many cases, farm work may provide the only introductory employment opportunities available for adolescents. These early employment experiences are increasingly important in motivating young people to seek a career in the industry and enter college programs in farming, food processing, food marketing, landscaping, horticulture, and other agricultural disciplines. Positive early work experiences, hands-on vocational educational training opportunities, and robust post-secondary education programs in agriculture and agribusiness are critical to the future of American agriculture and continuation of our abundant, diverse, safe, and economical food supply.

Ideally, youth will have developmentally- and age-appropriate agricultural work opportunities that can be performed safely and are within their physical, cognitive and emotional abilities. Young workers must be afforded extra protections from hazards or situations that would subject them to undue risk of injury or long-term health risks. The National Council of Agricultural Employers (NCAE) is the national trade association focusing exclusively on agricultural labor issues from the agricultural employer's viewpoint. Over 300 strong, NCAE members are growers, associations, and others whose business interests revolve around labor intensive agriculture. NCAE has a model workplace policy prohibiting unauthorized workers including underage children in the workplace. NCAE also has a 2010 "Youth policies in U.S. Agriculture" position paper. At the annual meeting of NCAE in Washington DC of February 2013, with 80 plus members in attendance, a panel with youth safety experts discussed the value of developing a model policy on youth employment that expands upon the earlier NCAE position statement. It was suggested that with more recent events surrounding regulatory proposals and more information about injuries experienced by youth working in agriculture, now is a good time to update, expand and promote a model position paper.

Through a series of teleconference calls, in-depth discussions were undertaken of relevant voluntary standards and regulations already in use and specific areas of concern regarding job assignments for youth. All drafts and updates were reviewed by members of the 20-person task force.

Working Youth and Supervisors

Adults/Supervisors

- Assign tasks
- Provide training
- Mitigate/address hazards
- Provide PPE
- Set boundaries and rules
- Enforce policies/procedures
- Provide a role model

Youth

- Perform tasks
- Follow rules/guidelines
- Ask questions
- Wear PPE

Supervision Training

- Online, interactive training for supervisors of young workers in English and Spanish
- Raise awareness of risks
 - including factors not traditionally considered workplace hazards
- Build supervisor's skills to protect young workers

www.AgOSH.org




¿Por qué estamos aquí?

Módulo 1

Los trabajadores jóvenes de edad 14-24 son únicos e importante adición a los trabajos.

Muchos trabajadores jóvenes son entusiastas, energéticos, y ansiosos para aprender.

Como supervisor de trabajadores jóvenes, usted tiene la oportunidad de influir en las actitudes de los trabajadores jóvenes hacia la seguridad en la granja.

A photograph showing a man in a light-colored polo shirt (the supervisor) pointing towards a young man in a plaid shirt and a white cap (the young worker). They are standing outdoors, likely on a farm, with a red tractor visible in the background.

Training for Supervisors

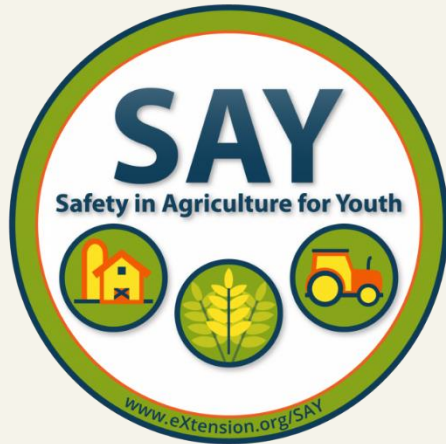
- Participate in a study
 - Evaluate online training
 - Supervisors of young agricultural workers
 - English or Spanish
- Receive \$50
 - Complete Survey and Training
 - Complete a follow-up survey 6 months later
- You are eligible if you are:
 - At least 18 years old
 - Supervise workers between 14-21 years



For more information, go to www.AgOSH.org

Safety in Agriculture for Youth

A National Initiative



United States Department of Agriculture
National Institute of Food and Agriculture

National Steering Committee

PENNSYLVANIA STATE UNIVERSITY



Cooperative Extension
College of Agricultural Sciences



THE OHIO STATE
UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

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UtahStateUniversity
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SAFETY EDUCATION FOR AMERICA'S FUTURE

SAY: Project Vision

Sustainable and accessible national clearinghouse for agricultural safety & health curriculum for youth

Multiple programs/projects/activities that:

- Increase safety & health knowledge
- Reduce hazard and risk exposure youth have while on farms and ranches

September 2013 – August 2021

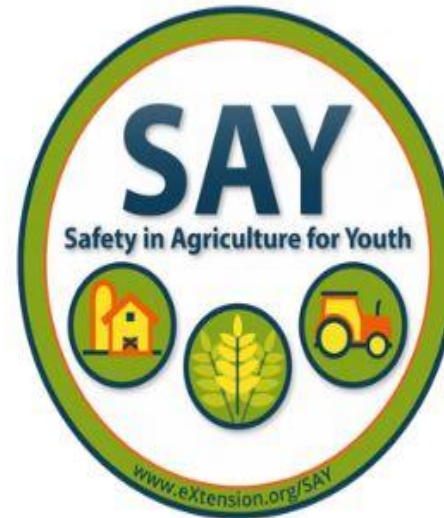
Web site hosted on
eXtension

www.extension.org/SAY

This is @ the Farm and Ranch
eXtension Safety and Health
FReSH
web page!

MAY 17, 2019 BY AG-SAFETY

Safety in Agriculture for Youth



Safety in Agriculture for Youth (SAY) is a grant project funded by the US Department of Agriculture (USDA), National Institute of Food and Agriculture to develop a sustainable and accessible national clearinghouse for agricultural safety and health curriculum for youth. For the funding period of 2017 - 2021, the SAY Project now consists of three funded project that each focus on a different aspect of youth farm safety. The projects are housed at the University of Nebraska Medical Center, the Ohio State University and Purdue University and will respectively focus on the SAY National Clearinghouse Project (e.g., SAY Clearinghouse, curricula submission and review, and marketing), Youth Farm Safety Education and Certification (YFSEC) Instructor Training and YFSEC Youth Training.

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fire first aid front page
general farm and ranch safety
general farm ranch safety
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manure storage mechanical hazard
national ag safety health reference documents and visuals

New Resources

Teacher resource guides will assist instructors with integrating curricula hosted in the SAY Clearinghouse by providing teaching methods to instructors on preparing students with safety instruction. The following teacher resource guides are available:

Animal Systems Career Pathway Teacher Resource Guide – Right from the Start: Safety Awareness for Livestock Producers

Animal Systems Career Pathway Teacher Resource Guide – Positive Animal Handling (Stockmanship) on Dairy Farms

Power, Structural and Technical System Teacher Resource Guide –

SAY National Clearinghouse

The SAY National Clearinghouse consists of two different types of educational products: formal curricula and other supporting resources and provides their alignment to Agriculture, Food, and Natural Resources (AFNR) Career Cluster Content Standards related to agricultural safety and health. Click on the link below to access the SAY National Clearinghouse:

[SAY National Clearinghouse](#)

Each educational resource has a page that provides you with a description, type of resource, language (English and/or Spanish), website link to resource, and alignment chart to AFRN standards.

Submitting your Ag Safety and Health Curriculum

Click **[HERE](#)** to be directed to submission instructions and link to submit your curriculum through the Curriculum Alignment Submission Tool (CAST).

Belief Statements & Guiding Principles for Youth Working in Ag

The Safety in Agriculture for Youth (SAY) Project National Steering Committee developed a belief statements document regarding youth working in agriculture. The belief statements outline consensus-based beliefs and principles that promote safety and health for youth working in agriculture. Click **[HERE](#)** for more information.

Injury Risk Assessment for SAE

The injury risk assessment for supervised agricultural experience (SAE) was developed by Utah State University through the SAY Project. Click **[HERE](#)** to access all of the components of the risk assessment.

SAY homepage is the hub to access all of the project activities with links to newsletters, websites of project partners, and MORE.

[www.extension.org/
SAY](http://www.extension.org/SAY)



.... An important goal of the committee is the articulation of consensus-based beliefs and principles that promote safety and health for youth working in agriculture. It is through these practices that we can collectively improve the safety and health of youth working in agriculture.

What Else?

- Supervision
- Child Development
- Benefits of Farm Work
- Communication Plan
- Bending, Lifting & Climbing
 - Videos
 - Fact Sheet



Additional Resources

- CultivateSafety.org



Search Site

- Home
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- Accidents
- Resources
- Online Tools

[Home](#) / [Online Tools](#)



AgInjuryNews

A publicly available interactive dataset of more than 3,000 farm-related injury reports.

[Visit Site](#)



Safe Agritourism

Provides information and over 200 free resources to help Agritourism operators keep visitors safe.

[Visit Site](#)



Farm Mapper

Digitally identify and map hazards through a birds-eye or augmented reality view.

[Visit Site](#)



Safe Return to Work

Empowering clinicians to provide injured workers with effective and adaptive return to work options.

[Visit Site](#)



Safer Farm

Allows anyone the ability to accurately recognize and resolve potential farm hazards.

[Visit Site](#)



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for Rural and Agricultural Health and Safety

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National Farm Medicine Center

Revisiting the SEM

Who do we need to reach?

Definitions

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

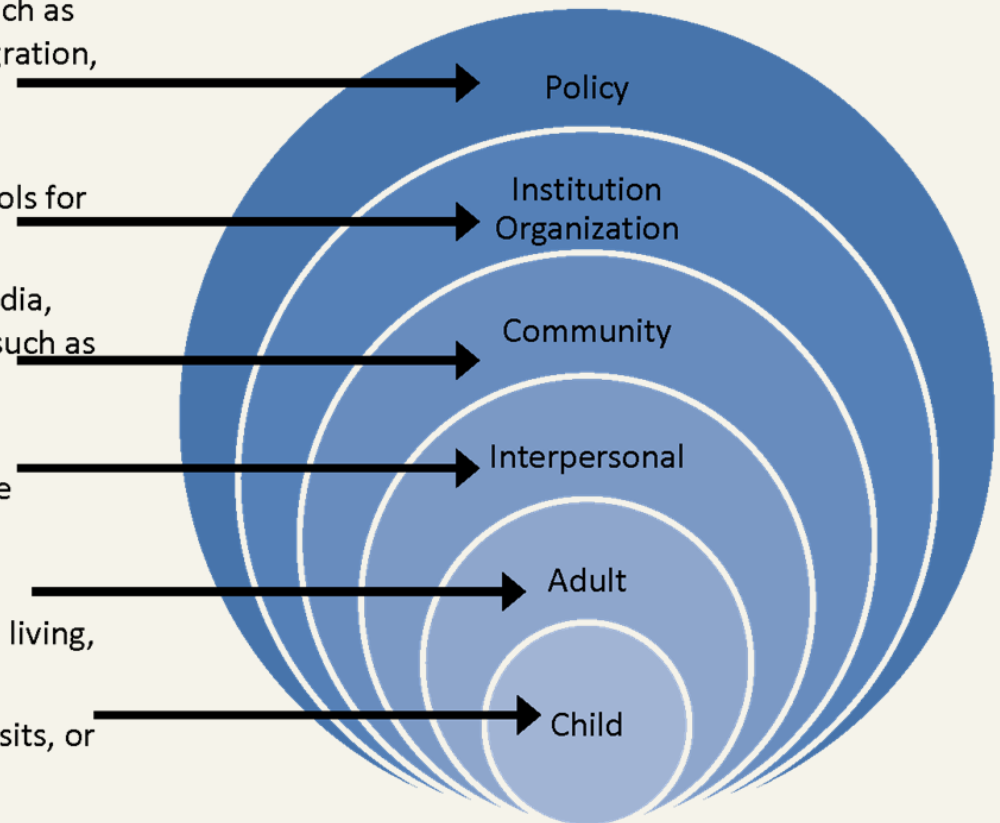
Institution/Organization: Corporations, national organizations, agencies that set standards and protocols for their trade agreements, employees and members.

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.



Interactive Activity

- Injury incident just occurred – multiple scenarios
- News report about the incident
 - Each group has a different incident
- Media person - requested follow-up interview
 - Provided a list of questions
 - Will “call back” to do interview
- 20 minutes to prep answers
- Reporter will “interview” each table

Questions?



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**National Farm
Medicine Center**

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