

Community-Based Agriculture: **Safety Guidelines for Youth Working in Gardens**



NORTH AMERICAN
GUIDELINES FOR
children's
AGRICULTURAL TASKS



Safety Guidelines
Hired Adolescent Farm Workers



National Children's Center

for Rural and Agricultural Health and Safety

Electronic Version

This booklet is available on our Cultivate Safety website: www.CultivateSafety.org/CBA.

Additional Copies

Additional copies of this resource are available by contacting the National Children's Center for Rural and Agricultural Health and Safety.

Phone: 1-800-662-6900

Email: nccrahs@mcrf.mfldclin.edu

Website: www.marshfieldclinic.org/nccrahs

Project website: www.CultivateSafety.org/CBA

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Disclaimer

This booklet is intended to provide recommendations for protecting the health and safety of children working in and visiting gardens. The National Children's Center for Rural and Agricultural Health and Safety (NCCRAHS) makes no claims that these materials will prevent all illnesses and injuries. Every garden is unique, so the users of this booklet are encouraged to adapt the information to their situations. NCCRAHS cannot be held responsible for adverse events resulting from following (or not following) the recommendations in this booklet.

Additional Resources

Cultivate Safety

cultivatesafety.org

Designed for farm parents, this website provides information on age appropriate tasks, including information on child development, work guidelines for both family farm and hired youth, a model policy for employing young workers and a repository of child farm injury news clippings.

U.S. Department of Labor: Youth Rules

1-866-487-2365

www.dol.gov/ or www.youthrules.dol.gov

National Institute for Occupational Safety and Health

Youth Worker Safety and Health

www.cdc.gov/niosh/topics/youth/

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This booklet represents select guidelines specific to gardening. Complete sets of guidelines for youth can be found at www.nagcat.org and for hired youth at www.marshfieldclinic.org/saghaf. Select NAGCAT and all SaGHAF guidelines are also available in Spanish on these websites.

Background and Purpose

In the US, gardens of all kinds (e.g. community, school, church, urban, etc.) are growing in popularity and diversity. Scholars and the US Department of Agriculture (USDA) refer to these efforts collectively as community-based agriculture (CBA). Community-based agriculture differs from community-supported agriculture (CSA) by emphasizing consumer participation, civic duty, and smaller scale production. An increasing amount of people are being fed garden-based produce either as part of a local food effort or civic program. Importantly, more people are also participating in the garden itself; this includes youth and adults unfamiliar with many of the tasks and equipment associated with cultivating food. This trend is expected to continue, making knowledge of safety strategies increasingly important.

Gardens have served many purposes, from therapeutic interventions to education and training, societal reintegration or simply passing on a tradition. Moving consumers closer to their food, especially young consumers, is an excellent way to get them interested and excited about agriculture.

There are a lot of positive aspects associated with gardens and other community-based agriculture and we want to ensure that users of this guide are embracing those positive and enjoyable elements that help connect us to nature. As we introduce children to

agriculture, several safety considerations should be reviewed and established by garden supervisors and organizers.

Agriculture remains one of the most dangerous industries in North America. Unintentional injury to children and youth can occur when adults and children mistake physical size and age for ability, and underestimate levels of risk and hazard.

In non-agricultural industries, there are regulations and work standards that indicate appropriate work for both adults and children. In agriculture, the standards and regulations are different, and may not apply on a farm or garden. Parents/supervisors often assign jobs based on their past practices, need for “extra hands” to get the job done, and preferences of the child and/or adult. The North American Guidelines for Children’s Agricultural Tasks (NAGCAT) were developed at the request of parents to assist them with assigning safe and appropriate jobs to children and youth. These guidelines can also assist adults with teaching youth how to do a job safely.

The Safety Guidelines for Hired Adolescent Farm Workers (SaGHAF) are based upon NAGCAT guidelines and federal regulations. These were developed to assist employers and supervisors with providing teenagers safe, appropriate and valuable work opportunities.



Always

Always make the experience fun.

Always have adult supervision when children are present.

Always know the location of bystanders before operating equipment.

Always make sure the experience is educational.

Always ensure everyone is trained in their assigned jobs.

Always track your successes and failures so you can build upon them in the future.

Always verify adults perform the safety-related jobs for which they are responsible.

Always have access to drinking water and hand-washing/restroom facilities.

Always enjoy the fruits of your labor.

Always use sunscreen and wear weather-appropriate clothing.

Always be willing to learn new things.

Never

Never be afraid to ask questions.

Never allow extra riders on tractors or lawn mowers.

Never allow children to climb or ride on motorized walk-behind equipment.

Never allow children to work on tasks that are beyond their ability (see guidelines for age-appropriate tasks).

Never assume that a child knows how to perform a job.

Never ride in the bed of a truck, UTV, or on a trailer.

Never interact with unfamiliar or dangerous wildlife.

Never use equipment for other than its intended purpose.

Never allow children to handle or be exposed to newly applied pesticides.

Never use electronic devices (e.g., cell phone) when operating equipment or when equipment is being operated in the immediate area.

A child's experience in a garden depends on the adults: if a child has fun, learns something and is safe, it is because of the responsible adults. Adults, not the children, should decide which tasks children will perform, what equipment they are exposed to, what training children will receive, and how they are supervised. The safety of the child is **always** the responsibility of the adults.



Basic Principles For Training Teens

What puts them at risk?

- Lack of experience
- Unfamiliar with work
- Enthusiasm-sometimes outweighs judgment
- Risk-taking attitude
- Drive to “prove” themselves
- Reluctance to ask questions

Cultural Sensitivity

- Invest time in learning about the teens’ cultures
- Demonstrate respect
- Show patience
- Seek help from community organizations associated with teens’ cultures
- Avoid value judgments
- Use sensitive language
- Recognize the importance of family
- Accept lack of direct eye contact
- Be aware of tendency to take risks

Adolescents respond most effectively to hands-on training in the job tasks they are to perform. Be sure to document all training in writing.

What to Train

- Doing the job safely.
- Recognizing hazards.
- Taking precautions.
- Using personal protective equipment.
- What to do if a problem arises.
- Guidelines to follow in case of emergency.
- How to report an injury.

How to Train

- Train using verbal interaction.
- Use visual aids and emphasize key points.
- Review instructions and seek feedback.
- Ask teen to repeat instructions.
- Demonstrate how to perform the task.
- Watch teen perform the task, correct mistakes and review proper procedure.
- Keep training sessions short.
- Ask for questions.

When to Train

- When the teen is first hired.
- When the teen is given a new task or tool.
- When a new hazard is introduced into the workplace.
- After an incident (an injury or close call).
- Periodically for review.



Employer/ Supervisor Responsibilities

Resource for regulations on teen workers:

U.S. Department of Labor
1-866-487-2365

Youth Labor websites
www.dol.gov/

Or
www.youthrules.dol.gov

National Institute for
Occupational Safety and
Health: Youth Worker Safety
and Health
[www.cdc.gov/niosh/topics/
youth/](http://www.cdc.gov/niosh/topics/youth/)

Employer responsibilities

- Provide workers with a safe workplace.
- Provide comprehensive training for employees.
- Keep written records of all training activities.
- Provide personal protective equipment
- Take immediate action when informed of a potentially hazardous situation.
- Immediately investigate incidents that occur.

Supervisor Responsibilities

- Assign tasks based on age and physical capabilities.
- Provide training on assigned tasks.
- Require teen to demonstrate safe operation of equipment.
- Clearly assign duties.
- Instruct teens on how to recognize risks
- Enforce health and safety procedures.
- Supervise while teen accomplishes tasks.
- Take action when unsafe acts or conditions occur.

Bending

Adult responsibilities

ADULTS NEED TO MAKE SURE:

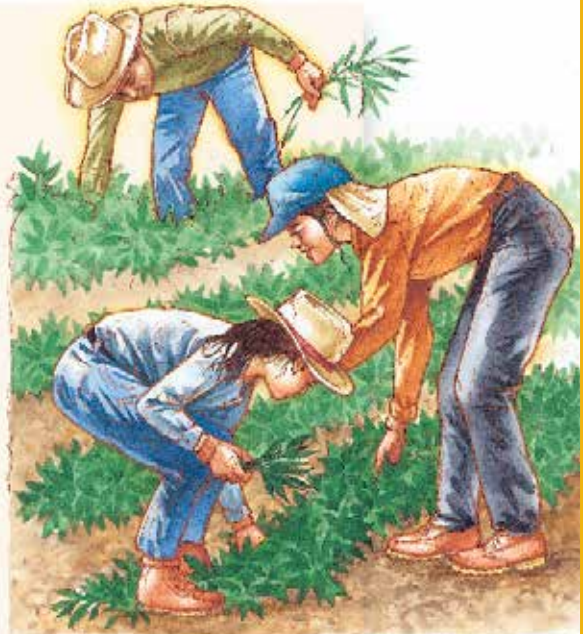
- Child has safe transport to the work area
- Work area has no hazards
- Work tools and work station are adjusted to reduce unnecessary bending
- Child has at least one ten-minute break every hour

The important steps for safe bending are followed:

1. Maintain good back posture
2. When standing and bending for long periods, shift weight from foot to foot
3. Stand with feet shoulder-width apart, one foot slightly in front of the other
4. Keeping back straight, move down to a squatting position using leg muscles
5. Hold in stomach muscles
6. Shift from leg to leg when squatting, keeping body balanced
7. Turn feet and arms, not back, to reach for objects
8. Do not stay in any one position for more than a few moments
9. Follow the above tips for repeated bending

Young people should be reminded:

- Improper standing and bending can lead to long-term back pain
- Take frequent stretch breaks to avoid overuse of muscles



Can your child do this job?

Main Hazards



Slippery/uneven surface can lead to slips, trips and falls



Weight can strain muscles



Repetitive motion can strain muscles and injure back and joints

ABILITY

If the child needs to lift something, is the load less than 10-15% of his or her body weight?

- Yes.
- No. **!** CAUTION! An adult should do the lifting.

Is the child going through a growth spurt? For example, is he or she clumsy or frequently changing clothing size?

- Yes. **STOP** STOP! Children in periods of rapid growth become less flexible, increasing the chance of muscle strain and injury to back and joints.
- No.

TRAINING

Has the child been trained on bending techniques?

- Yes.
- No. **STOP** STOP! Bending incorrectly can cause back injury.

If the child needs to lift something, has he or she been trained on lifting techniques?

- Yes.
- No. **STOP** STOP! Lifting incorrectly can cause back injury.

Has an adult demonstrated bending on site?

- Yes.
- No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 7-9: **LIMIT** job to 15 minutes. **WATCH** constantly.

Age 10-11: **LIMIT** job to 20 minutes. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 12-13: When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is bending correctly, taking frequent stretch breaks, and not showing signs of fatigue.

Remember



Non-skid shoes

Climbing

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child is free of medical conditions or medications that affect his or her ability to concentrate and maintain balance
- Ladder is ANSI or CSA approved and free of damage
- Ladder is the right size for the child
- Climbing structure is stable and safe
- Work area has no hazards (especially electric wires)

The important steps for safe climbing are followed:

These steps may be modified if the ladder is permanently secured to a structure

1. Check that the ladder is firmly set
2. Grasp alternate rungs and take first step
3. Pause and think about whether or not the ladder feels stable
4. Climb up, keeping feet and hips within sides of ladder frame
5. Always maintain three contact points, for example, two hands and one foot
6. Keep head up and back straight
7. Concentrate on the climbing process
8. Do not climb beyond the third rung from the top
9. Follow the above tips when climbing back down the ladder



Can your child do this job?

Main Hazards



Working up high can lead to falls



Weight of ladder can strain muscles



Contact with wires can cause electric shock

ABILITY

Is the child comfortable with heights?

- Yes.
- No. **STOP!** Children who are afraid of heights are more likely to be injured.

Is the child going through a growth spurt? For example, is he or she clumsy or frequently changing clothing size?

- Yes. **STOP!** Children in periods of rapid growth become less coordinated, increasing the chance of falling off the ladder.
- No.

Can the child balance, lift, turn and stretch on a two-step ladder?

- Yes.
- No. **STOP!** Children with poor balance are likely to fall off the ladder.

Does the ladder weigh less than 10-15% of the child's body weight?

- Yes.
- No. **CAUTION!** An adult should help carry the ladder.

Does the child have to carry the ladder less than 10-15 yards?

- Yes.
- No. **CAUTION!** An adult should carry the ladder.

Does the child usually go with his or her "gut" feeling without thinking too much about what could happen next?

- Yes. **CAUTION!** Children who act on impulse need close supervision.
- No.

Is your child responsible? Do you trust your child to do what's expected without anyone checking?

- Yes.
- No. **CAUTION!** Children who behave irresponsibly need close supervision.

Does the child do things that seem dangerous for the thrill of it?

- Yes. **CAUTION!** Children who take risks or behave dangerously need close supervision.
- No.

TRAINING

Has the child been trained on ladder and climbing safety?

- Yes.
- No. **STOP!** Training is needed to prevent injury.

Has the child been trained to identify electrical hazards?

- Yes.
- No. **STOP!** Training is needed to prevent electric shock.

Has an adult demonstrated climbing on site?

- Yes.
- No. **STOP!** Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **CAUTION!** An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP!** The right level of supervision is key to preventing injuries.

Remember



Non-skid shoes



Leather gloves

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 16+: **WATCH** nearly constantly at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is climbing correctly and not showing signs of fatigue.

Lifting

Adult responsibilities

ADULTS NEED TO MAKE SURE:

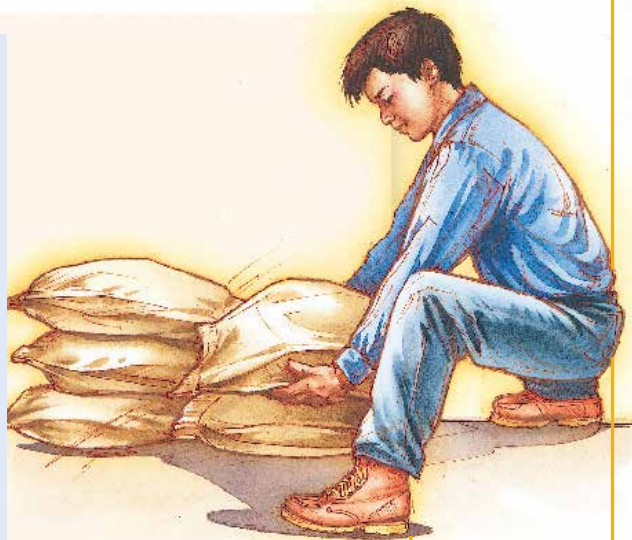
- Work area has no hazards
- Object to be lifted weighs less than 10-15% of child's body weight
- Child carries object less than 10-15 yards

The important steps for safe lifting are followed:

1. Stand close to object to be lifted
2. Spread feet wide to straddle the object
3. Squat, bending knees and hips
4. Keep head up and back straight
5. Hold in stomach muscles
6. Lift using leg muscles
7. Keep the load close to body with a good grip
8. Turn feet, not back, in the direction you are going
9. Follow the above tips when putting the object down

Young people should be reminded:

- Improper lifting can lead to long-term back pain
- Ask for help when the load is too heavy or you don't know how heavy it is
- "Hug the load"
- Use mechanical devices such as carts and levers whenever possible
- Don't lift objects above chest height
- Bulky objects are more difficult to balance and carry
- Avoid twisting while lifting
- Take frequent stretch breaks to avoid overuse of muscles



Can your child do this job?

Main Hazards



Slippery/uneven surface can lead to slips, trips and falls



Weight of objects can strain muscles



Repetitive motion can strain muscles and injure back and joints

ABILITY

Can the child bend safely? (See "Bending")

- Yes.
- No. **STOP!** Children must be able to bend correctly to do this job safely.

Is the child going through a growth spurt? For example, is he or she clumsy or frequently changing clothing size?

- Yes. **STOP!** Children in periods of rapid growth become less flexible, increasing the chance of muscle strains and injury to back and joints.
- No.

Do the objects to be lifted weigh less than 10-15% of the child's body weight?

- Yes.
- No. **STOP!** Children lifting more than 15% of their body weight are more likely to injure their backs.

Does the child have to carry the load less than 10-15 yards?

- Yes.
- No. **STOP!** Children carrying a load more than 10-15 yards are more likely to injure their backs.

TRAINING

Has the child been trained on lifting techniques?

- Yes.
- No. **STOP!** Lifting incorrectly can cause back injury.

Has an adult demonstrated lifting on site?

- Yes.
- No. **STOP!** Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP!** The right level of supervision is key to preventing injuries.

Remember



Non-skid shoes

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 7-9: **LIMIT** job to 15 minutes. **WATCH** constantly.

Age 10-11: **LIMIT** job to 20 minutes. **CHECK** every few minutes.

Age 12-13: **CHECK** every few minutes.

Age 14-15: **CHECK** every few minutes at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is lifting correctly and not showing signs of fatigue.

Picking rock

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child has safe transport to the field
- Child wears long sleeved shirt, long pants, wide brimmed hat, sunglasses and sunscreen
- Child has at least one ten-minute break every hour
- Child drinks a quart of fluids every hour



Can your child do this job?

Main Hazards



Uneven surface can lead to trips and falls



Weight of rocks can strain muscles



Repetitive motion can strain muscles and injure back and joints

ABILITY

Can the child bend and lift safely? (See "Bending"/"Lifting")

- Yes.
- No. **STOP** STOP! Children must be able to bend and lift correctly to do this job safely.

Is the child going through a growth spurt? For example, is he or she clumsy or frequently changing clothing size?

- Yes. **STOP** STOP! Children in periods of rapid growth become less flexible, increasing the chance of muscle strain and injury to back and joints.
- No.

Do the rocks the child will carry weigh less than 10-15% of his or her body weight?

- Yes.
- No. **STOP** STOP! Children lifting more than 15% of their body weight are more likely to injure their backs.

Does the child have to carry the rocks less than 10-15 yards?

- Yes.
- No. **!** CAUTION! An adult should keep the collection point close by.

If the child is 12 or older, can he or she repeat a manual procedure for 50 minutes without becoming exhausted?

- Yes.
- No. **STOP** STOP! Children working beyond their endurance are more likely to be injured.

Does the child have good peripheral vision? For example, while looking straight ahead, can the child see your finger entering his or her field of vision at shoulder level?

- Yes.
- No. **STOP** STOP! Children with limited vision may not see people or obstacles in the work area.

Does the child have at least a 15-20 minute attention span? For example, can the child play a board game for 20 minutes?

- Yes.
- No. **STOP** STOP! Children working beyond their attention span are easily distracted and more likely to be injured.

Does the child do things that seem dangerous for the thrill of it?

- Yes. **!** CAUTION! Children who take risks or behave dangerously are more likely to be injured.
- No.

Does the child usually go with his or her "gut" feeling without thinking too much about what could happen next?

- Yes. **!** CAUTION! Children who act on impulse need close supervision.
- No.

TRAINING

Has the child been trained on lifting techniques?

- Yes.
- No. **STOP** STOP! Lifting incorrectly can cause back injury.

Has an adult demonstrated picking rocks on site?

- Yes.
- No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Remember



Steel-toed shoes with non-skid soles



Good handwashing



Leather gloves

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 7-9: **LIMIT** job to 15 minutes. **WATCH** constantly.

Age 10-11: **LIMIT** job to 20 minutes. **WATCH** nearly constantly at first. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 12-13: **CHECK** every few minutes.

Age 14-15: **CHECK** every few minutes.

Age 16+: When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is bending and lifting correctly and not showing signs of fatigue.

Hand-weeding



Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child has safe transport to the field
- Re-entry standards are followed
- Work area has no hazards
- Child and adult can communicate by cell phone, walkie-talkies or other method
- Child has no insect allergies
- Child wears long sleeved shirt, long pants, wide brimmed hat, sunglasses and sunscreen
- Break areas are provided away from the work site with bathrooms and water for drinking and washing hands
- Child has at least one ten-minute break every hour
- Child drinks a quart of fluids every hour

Can your child do this job?

ABILITY

Can the child bend safely? (See "Bending")

- Yes.
- No. **STOP** STOP! Children must be able to bend correctly to do this job safely.

Does the filled container the child will lift weigh less than 10-15% of his or her body weight?

- Yes.
- No. **!** CAUTION! An adult should lift the filled container.

Does the child have to carry the filled container less than 10-15 yards?

- Yes.
- No. **!** CAUTION! An adult should keep the collection point close by or carry the filled container to the collection point.

Are cutting and hoeing tools the right size for the child?

- Yes.
- No. **STOP** STOP! The wrong size tools can cause injury.

If the child is 12 or older, can he or she repeat a manual task for 50 minutes without becoming exhausted?

- Yes.
- No. **STOP** STOP! Children working beyond their endurance are more likely to be injured.

Does the child have at least a 15-20 minute attention span? For example, can the child play a board game for 20 minutes?

- Yes.
- No. **STOP** STOP! Children working beyond their attention span are easily distracted and more likely to be injured.

Does the child do things that seem dangerous for the thrill of it?

- Yes. **!** CAUTION! Children who take risks or behave dangerously should be closely supervised. Limit cutting with a knife.
- No.

TRAINING

Has the child been trained to use cutting tools?

- Yes.
- No. **STOP** STOP! Training is needed to prevent injury.

Has an adult demonstrated hand-weeding on site?

- Yes.
- No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Remember



Non-skid shoes



Good handwashing



Leather gloves

Main Hazards



Sun can cause heat exhaustion



Repetitive motion can strain muscles and injure back and joints



Sharp tools can cut skin

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 7-9: **LIMIT** job to 15 minutes. **NO** cutting tools. **WATCH** constantly.

Age 10-11: **LIMIT** job to 20 minutes. **NO** cutting tools. **WATCH** nearly constantly at first. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 12-13: **WATCH** constantly if the child uses cutting tools. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 14-15: **CHECK** every few minutes at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is bending correctly and not showing signs of fatigue.

Harvesting strawberries

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child has safe transport to the field
- Re-entry standards are followed
- Work area has no hazards
- Child has no insect allergies
- Child wears long sleeved shirt, long pants, wide brimmed hat, sunglasses and sunscreen
- Break areas are provided away from the work site with bathrooms and water for drinking and washing hands
- Child has at least one ten-minute break every hour
- Child drinks a quart of fluids every hour

Can your child do this job?

ABILITY

Can the child bend safely? (See "Bending")

- Yes
- No. **STOP** STOP! Children must be able to bend correctly to do this job safely.

Does the filled container the child will carry weigh less than 10-15% of the child's body weight?

- Yes
- No. **!** CAUTION! An adult should carry the filled container.

Does the child have to carry the filled container less than 10-15 yards?

- Yes
- No. **!** CAUTION! An adult should keep the collection point close by or carry filled containers to the collection point.

If the child is 12 or older, can he or she repeat a manual procedure for 50 minutes without becoming exhausted?

- Yes
- No. **STOP** STOP! Children working beyond their endurance are more likely to be injured.

Does the child have at least a 15-20 minute attention span? For example, can the child play a board game for 20 minutes?

- Yes
- No. **STOP** STOP! Children working beyond their attention span are easily distracted and more likely to be injured.



TRAINING

Has the child been trained on lifting techniques?

- Yes
- No. **STOP** STOP! Lifting incorrectly can cause back injury.

Has an adult demonstrated harvesting strawberries on site?

- Yes
- No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes
- No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Main Hazards



Sun can cause heat exhaustion



Repetitive motion can strain muscles and injure back and joints



Contact with chemicals can cause disease, now or later

Remember



Non-skid shoes



Good handwashing

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 7-9: LIMIT job to 15 minutes. **WATCH** constantly.

Age 10-11: LIMIT job to 20 minutes. **WATCH** nearly constantly at first. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 12-13: CHECK every few minutes at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is bending and lifting correctly and not showing signs of fatigue.

Age 14-15: When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is bending and lifting correctly and not showing signs of fatigue.

Hand-harvesting vegetables

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child has safe transport to the field
- Re-entry standards are followed
- Work area has no hazards
- Child has no insect allergies
- Child wears long sleeved shirt, long pants, wide brimmed hat, sunglasses and sunscreen
- Break areas are provided away from the work site with bathrooms and water for drinking and washing hands
- Child has at least one ten-minute break every hour
- Child drinks a quart of fluids every hour



Can your child do this job?

Main Hazards



Sun can cause heat exhaustion



Contact with chemicals can cause disease, now or later



Repetitive motion can strain muscles and injure back and joints

ABILITY

Can the child bend and lift safely? (See "Bending"/"Lifting")

Yes
 No. **STOP** STOP! Children must be able to bend and lift correctly in order to do this job safely.

Are cutting tools the right size for the child?

Yes
 No. **STOP** STOP! The wrong size tools can cause injury.

Does the filled container the child will carry weigh less than 10-15% of his or her body weight?

Yes.
 No. **!** CAUTION! An adult should carry the filled container.

Does the child have to carry the filled container less than 10-15 yards?

Yes
 No. **!** CAUTION! An adult should keep the collection point close by or carry the filled container to the collection point.

If the child is 12 or older, can he or she repeat a manual procedure for 50 minutes without becoming exhausted?

Yes.
 No. **STOP** STOP! Children working beyond their endurance are more likely to be injured.

Does the child have at least a 15-20 minute attention span? For example, can the child play a board game for 20 minutes?

Yes
 No. **STOP** STOP! Children working beyond their attention span are easily distracted and more likely to be injured.

Does the child have good eye-hand coordination? For example, can the child place a key in a lock?

Yes.
 No. **STOP** STOP! Good eye-hand coordination is needed to prevent injury.

Does the child do things that seem dangerous for the thrill of it?

Yes **!** CAUTION! Children who take risks or behave dangerously need close supervision. Limit cutting with a knife.
 No.

TRAINING

Has the child been trained to use cutting tools safely?

Yes
 No. **STOP** STOP! Training is needed to prevent injury.

Has an adult demonstrated hand-harvesting vegetables on site?

Yes
 No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

Yes
 No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

Yes
 No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Remember



Non-skid shoes



Good handwashing



Gloves (may be leather or moisture resistant)

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 7-9:
LIMIT job to 15 minutes.
NO cutting tools. **WATCH** constantly.

Age 10-11:
LIMIT job to 20 minutes.
NO cutting tools. **WATCH** nearly constantly.

Age 12-13: **WATCH** constantly at first if the child uses cutting tools. When the child shows he or she can do the job, **CHECK** every few minutes.

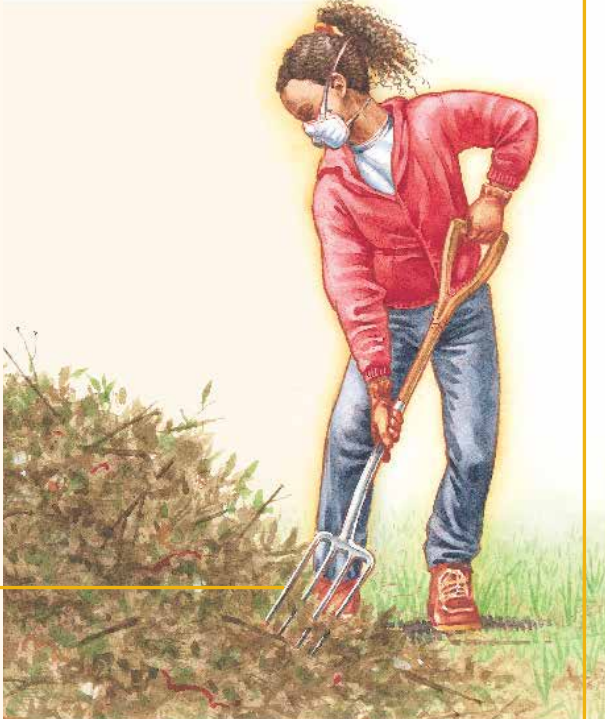
Age 14-15: **CHECK** every few minutes at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is bending and lifting correctly and not showing signs of fatigue.

Composting

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Work area has no hazards
- Child has been fitted for a respirator and shown how to use it
- Child has no insect allergies
- Child changes outer clothing and washes hands after job



Can your child do this job?

ABILITY

Can the child lift safely?
(See "Lifting")

- Yes.
- No. **STOP** STOP! Children must be able to lift correctly to do this job safely.

Are the tools the right size for the child?

- Yes.
- No. **STOP** STOP! The wrong size tools can cause injury.

Do the materials the child will lift weigh less than 10-15% of his or her body weight?

- Yes.
- No. **STOP** STOP! Children lifting more than 15% of their body weight are more likely to injure their backs.

Can the child recognize a hazard and solve the problem without getting upset?

- Yes.
- No. **STOP** STOP! Children must be able to recognize hazards, think about how to respond, and stay calm to prevent injury.

TRAINING

Has an adult demonstrated composting on site?

- Yes.
- No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Main Hazards



Dust, mold and organic particles can cause breathing problems



Weight of soil and compost can strain muscles

Remember



Good handwashing



Respirator



Leather gloves

Supervision

What's the right amount?
Here are suggestions—but remember, it depends on the child.

Age 10-11:
LIMIT job to 20 minutes and have child collect materials to be composted. **WATCH** nearly constantly at first. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 12-13:
WATCH constantly at first. When the child shows he or she can do the job, **CHECK** every few minutes.

Age 14-15:
CHECK every few minutes at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes.

Pruning trees and vines

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child has safe transport to the field
- Re-entry standards are followed
- Work area has no hazards
- Child has no insect allergies
- Child wears long sleeved shirt, long pants, wide brimmed hat, sunglasses and sunscreen
- Break areas are provided away from the work site with bathrooms and water for drinking and washing hands
- Child has at least one ten-minute break every hour
- Child drinks a quart of fluids every hour



Can your child do this job?

Main Hazards



Working up high can lead to falls



Sharp tools can cut skin



Repetitive motion can strain muscles and injure back and joints

ABILITY

If climbing is needed, can the child set and climb the ladder?
(See "Climbing")

- Yes.
- No. **STOP** STOP! Children must be able to set and climb a ladder to do this job safely.

Are the cutting tools the right size for the child?

- Yes.
- No. **STOP** STOP! The wrong size tools can cause injury.

Can the child stay focused on a job up to 50 minutes?

- Yes.
- No. **STOP** STOP! Children working beyond their attention span are easily distracted and more likely to be injured.

Does the child usually go with his or her "gut" feeling without thinking too much about what could happen next?

- Yes. **!** CAUTION! Children who act on impulse need close supervision.
- No.

Is your child responsible? Do you trust your child to do what's expected without anyone checking?

- Yes.
- No. **!** CAUTION! Children who behave irresponsibly need close supervision.

Does the child do things that seem dangerous for the thrill of it?

- Yes. **!** CAUTION! Children who take risks or behave dangerously need close supervision.
- No.

TRAINING

Has the child been trained to use cutting tools safely?

- Yes.
- No. **STOP** STOP! Training is needed to prevent injury.

Has an adult demonstrated pruning trees and vines on site?

- Yes.
- No. **STOP** STOP! Children learn best when shown how to do the job at the work site

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

- Yes.
- No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

- Yes.
- No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Remember



Non-skid shoes



Eye protection



Leather gloves

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 12-13:
WATCH constantly at first. When the child shows he or she can do the job **CHECK** every few minutes.

Working from the ground

Age 14-15:
CHECK every few minutes at first. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is not showing signs of fatigue.

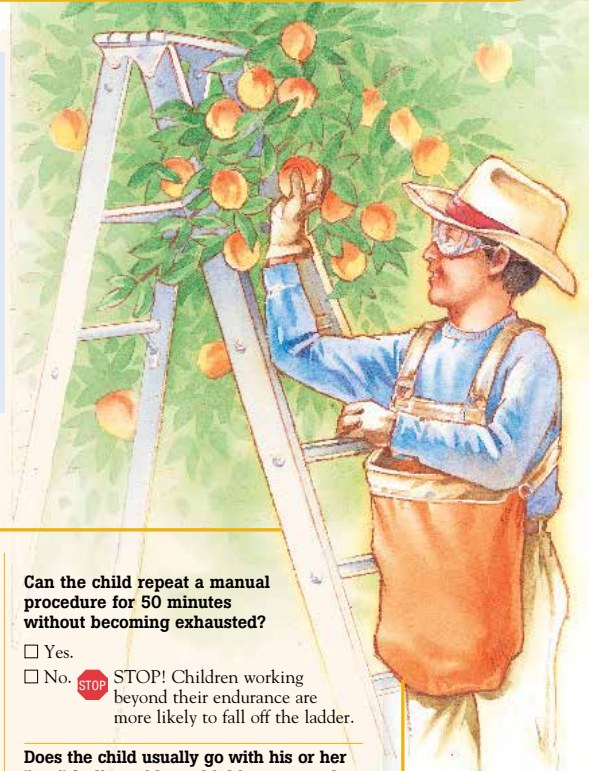
Age 16+:
CHECK every few minutes. When the child shows he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is not showing signs of fatigue.

Harvesting tree fruit

Adult responsibilities

ADULTS NEED TO MAKE SURE:

- Child has safe transport to the field
- Re-entry standards are followed
- Work area has no hazards
- Child has no insect allergies
- Child wears long sleeved shirt, long pants, wide brimmed hat, sunglasses and sunscreen
- Break areas are provided away from the work site with bathrooms and water for drinking and washing hands
- Child has at least one ten-minute break every hour
- Child drinks a quart of fluids every hour



Can your child do this job?

Main Hazards



Working up high can lead to falls



Weight of ladder and/or fruit can strain muscles



Repetitive motion can strain muscles and injure back and joints

ABILITY

Can the child set and climb the ladder? (See "Climbing")

Yes.

No. **STOP** STOP! Children must be able to set and climb a ladder to do this job safely.

Can the child lift safely? (See "Lifting")

Yes.

No. **STOP** STOP! Children must be able to lift correctly to do this job safely.

Is the child going through a growth spurt? For example, is he or she clumsy or frequently changing clothes size?

Yes. **STOP** STOP! Children in periods of rapid growth become less coordinated, increasing the chance of falling off the ladder.

No.

Can the child balance, lift, turn and stretch on a two-step ladder, with a spotter?

Yes.

No. **STOP** STOP! Children with poor balance are likely to fall off the ladder.

Is the collection bag properly sized to limit the weight the child will carry to 10-15% of his or her body weight?

Yes.

No. **STOP** STOP! Children lifting more than 15% of their body weight are more likely to injure their backs.

Does the child have to carry the filled container less than 10-15 yards?

Yes.

No. **!** CAUTION! An adult should keep the collection point close by or carry the filled containers to the collection point.

Can the child repeat a manual procedure for 50 minutes without becoming exhausted?

Yes.

No. **STOP** STOP! Children working beyond their endurance are more likely to fall off the ladder.

Does the child usually go with his or her "gut" feeling without thinking too much about what could happen next?

Yes. **!** CAUTION! Children who act on impulse need close supervision.

No.

Is your child responsible? Do you trust your child to do what's expected without anyone checking?

Yes.

No. **!** CAUTION! Children who behave irresponsibly need close supervision.

Does the child do things that seem dangerous for the thrill of it?

Yes. **!** CAUTION! Children who take risks or behave dangerously need close supervision.

No.

TRAINING

Has an adult demonstrated harvesting tree fruit on site?

Yes.

No. **STOP** STOP! Children learn best when shown how to do the job at the work site.

Has the child shown he or she can do the job safely 4 to 5 times under close supervision?

Yes.

No. **!** CAUTION! An adult must watch constantly until the child shows he or she can do the job.

SUPERVISION

Can an adult supervise as recommended?

Yes.

No. **STOP** STOP! The right level of supervision is key to preventing injuries.

Supervision

What's the right amount? Here are suggestions—but remember, it depends on the child.

Age 16+: When the child shows that he or she can do the job, **LEAVE** for 15 to 30 minutes, then make sure the child is climbing and lifting correctly and not showing signs of fatigue.

Remember



Non-skid shoes



Eye protection



Good handwashing

Adolescents at Work

Remember



Safety Check



Personal Protective Equipment



Rest/Drinking Water



Remember



Supervision



Communication



Safety Training

Supervisor responsibilities

Work conditions

- Keep adolescent characteristics in mind when assigning tasks
- Clearly assign specific duties
- Assign supervisors who work well with youth, are consistent, and provide good examples

Teen characteristics

- Physical, cognitive, and emotional development differs from adults
- Like to explore, experiment and take risks
- Have limited sense of vulnerability
- Will try to “prove” themselves
- Are susceptible to peer pressure
- Are inexperienced in work practice and responsibilities
- Lack assertiveness and may be afraid to ask questions

Training and supervision

- It's important to:
 - Create atmosphere for questions
 - Provide feedback
 - Avoid assigning teens to work alone
- Provide appropriate training on tasks
- Teach how to recognize risks
- Instruct how to respond to emergencies
- Track work schedules to remain under work-hour limit
- Identify equipment prohibited for adolescents
- Identify and match adolescent with mentor
- Train supervisors on employment rules for teens under age 18

Federal Regulations: Fair Labor Standards Act (FLSA)

- Minimum age for most employment outside of school hours is 14 years.
- Youth 12 or 13 years old may work during non-school hours with a parent or with consent from a parental/guardian; they are limited to hand-harvest of very few crops including berries, bulbs, spinach and cucumbers.
- Hazardous duties known as the Hazardous Orders are prohibited for those under 16 years, refer to: www.dol.gov/dol/topic/youthlabor/hazardousjobs.htm.
- Some state laws regulate the hours of work for all minors and restrict work activities for 16- and 17-year-olds.
- Check minimum wage laws that apply (i.e., federal or state); typically overtime pay is not required.
- Check your state regulations regarding heat exposure, sanitation facilities, and general health and safety requirements that may apply.
- Find state-specific child labor information at www.youthrules.dol.gov.

Working Outdoors

Main Hazards



Sun, Heat and Severe Weather



Drowning



Insects/Pests



Remember



Rest/Drinking Water



Sun Protection



Good Handwashing

Supervisor responsibilities

Work conditions

- Provide hand washing options
- Provide toilets
- Have drinking water available at all times
- Allow for rest in shaded areas
- Require workers to wear appropriate clothing while working
- Help employees minimize risk of insect bites and other pest exposures
- Ensure teens understand your emergency evacuation plan
- Be aware of changing weather conditions
- Be aware of signs/symptoms of heat-related illnesses
- Have a first aid station and an individual designated for administering first aid
- Avoid exposure to pesticides, excessive dust and other irritants
- Be aware of drowning hazards and have rescue equipment on site

Federal Regulations: Fair Labor Standards Act (FLSA)

- Minimum age for most employment outside of school hours is 14 years.
- Youth 12 or 13 years old may work during non-school hours with a parent or with consent from a parental/guardian; they are limited to hand-harvest of very few crops including berries, bulbs, spinach and cucumbers.
- Hazardous duties known as the Hazardous Orders are prohibited for those under 16 years, refer to www.dol.gov/dol/topic/youthlabor/hazardousjobs.htm.
- Some state laws regulate the hours of work for all minors and restrict work activities for 16- and 17-year-olds.
- Check minimum wage laws that apply (i.e., federal or state); typically overtime pay is not required.
- Check OSHA or your state health and safety regulations regarding heat exposure, sanitation facilities, and general health and safety requirements that may apply.
- Find state-specific child labor information at www.youthrules.dol.gov.

Hand Harvesting Fruit and Vegetables

Main Hazards



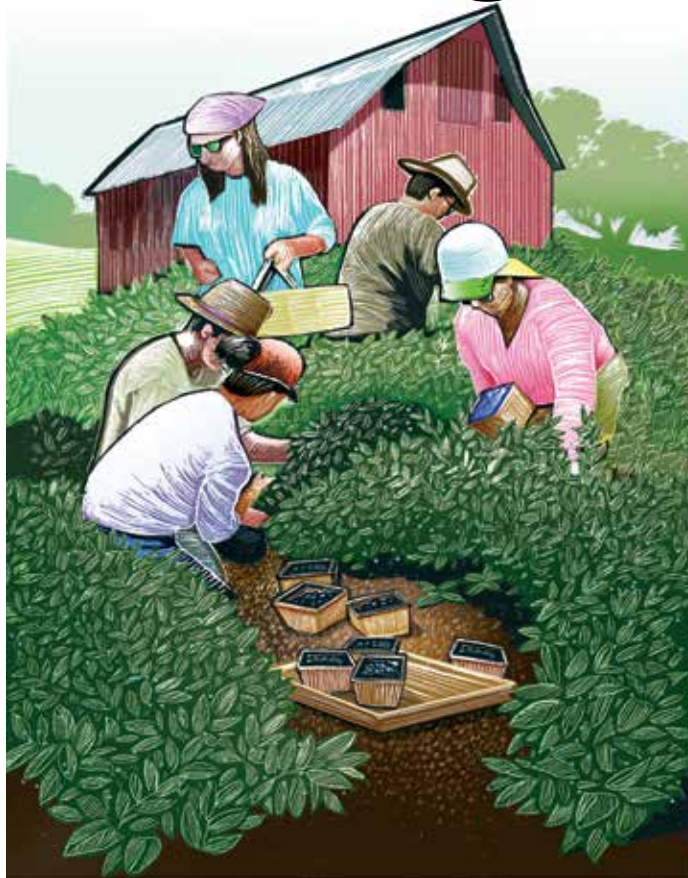
Sharp Tools



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.youthrules.dol.gov.
- 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.

Harvesting Tree Fruit & Climbing a Ladder

Main Hazards



Heavy Lifting



Risk of Falling



Heat Stress



Remember



Eye Protection



Non-skid Shoes



Good Handwashing

Supervisor responsibilities

Work conditions

- Provide safe transport to field
- Ensure reentry standards are followed
- Ensure climbing structure is stable
- Maintain work area free from hazards
- Allow for rest in shaded areas
- Provide toilet facilities and water for drinking and washing hands
- Allow 10-minute break every hour

Teen assessment

- Be aware of insect allergies or medical conditions
- Has good coordination
- Can repeat task for 50 minutes without becoming exhausted
- Has good peripheral vision
- Has positive safety attitude
- Can easily carry 15 percent of body weight
- Can easily grasp objects with hands

Training and supervision

- Ensure ladder steps are safe for climbing
- Train employee on safe climbing:
 1. Grasp alternate rungs and take first step
 2. Be sure ladder feels stable
 3. Keep feet and hips within sides of ladder frame
 4. Always maintain three contact points
 5. Keep head up and back straight
 6. Concentrate on the climb
 7. Do not climb beyond third rung from the top
 8. Follow the above tips when climbing down
- Do not allow people or objects below the ladder

Federal Regulations: Fair Labor Standards Act (FLSA)

- Refer to Adolescents at Work guideline for general regulations.
- Find state-specific information at www.youthrules.dol.gov.
- Youth under 16 years may not work on a ladder or other elevated structure more than 20 feet off the ground.
- 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).

Additional Considerations

In addition to the information and guidelines already provided in this booklet, there are other considerations for youth working in gardens. Information and resources on key topics are available on the *Integrating Safety into Agritourism* website (www.safeagritourism.com).

These materials are easily adaptable for use in community gardens and are free to download and use.

Supervision: Children are often unfamiliar with the hazards and tasks found in gardens. This makes it extremely important to have an adequate number of adults present to supervise children. These adults must be actively supervising, not distracted by texting, web surfing, or conversation unrelated to the job at hand.

Emergency Preparedness: Even if garden leadership implements a comprehensive safety strategy, there is always the possibility of an injury or emergency. This makes emergency planning important, as well as ensuring workers are available to respond appropriately until emergency service personnel arrive. Written emergency plans, policies and procedures should be shared with all responsible adults.

Handwashing and Restrooms: Proper hand washing and adequate restroom facilities are important hygienic considerations in any public place, including gardens. Proper hand washing will eliminate dust and dirt as well as contaminants, allergens, and soil pathogens that could lead to illness.

Traffic and Parking: Inadequate parking and poor pedestrian traffic flow can lead to serious injury or death, especially

when children are present. Children often have difficulty judging the speed and distance of oncoming vehicles and are easily distracted. Garden areas should be designed with an adequate amount of parking and safe pedestrian walkways that do not cross roads. Ensure the garden is located at least 75 feet from parking and traffic areas, or has a fence or other barrier separating the garden from traffic.

Signs: Signs are an important method of communicating information to workers and visitors. Signs can be posted to demonstrate proper procedures (e.g., handwashing sign), to designate areas where children and/or visitors are not allowed (e.g., Keep Out sign), to educate about hazards (e.g., Electrical Hazard sign), or to indicate when/where personal protective equipment is required (e.g., Eye Protection Required sign).

Policies, Procedures and Guidelines: Policies, procedures and guidelines are recommended to safely and efficiently operate a garden. Numerous example policies, templates and checklists are available for free and can be adapted for garden use.

Insurance: It is important to ensure your garden has adequate insurance coverage. The *Integrating Safety into Agritourism* website contains information on insurance coverage, including an “Insurance Discussion Sheet” with information and talking points to review with your insurance agent. Insurance coverage varies greatly; your insurance agent can help you determine if you have the coverage you need.

Notes



National Children's Center
for Rural and Agricultural Health and Safety

For more information contact:

1000 North Oak Avenue
Marshfield, WI 54449-5777

Phone: 1-800-662-6900

Email: nccrahs@mcrf.mfldclin.edu

Website: www.marshfieldclinic.org/nccrahs

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