

# **Worksite and Secondary Injury Assessment and Documentation**

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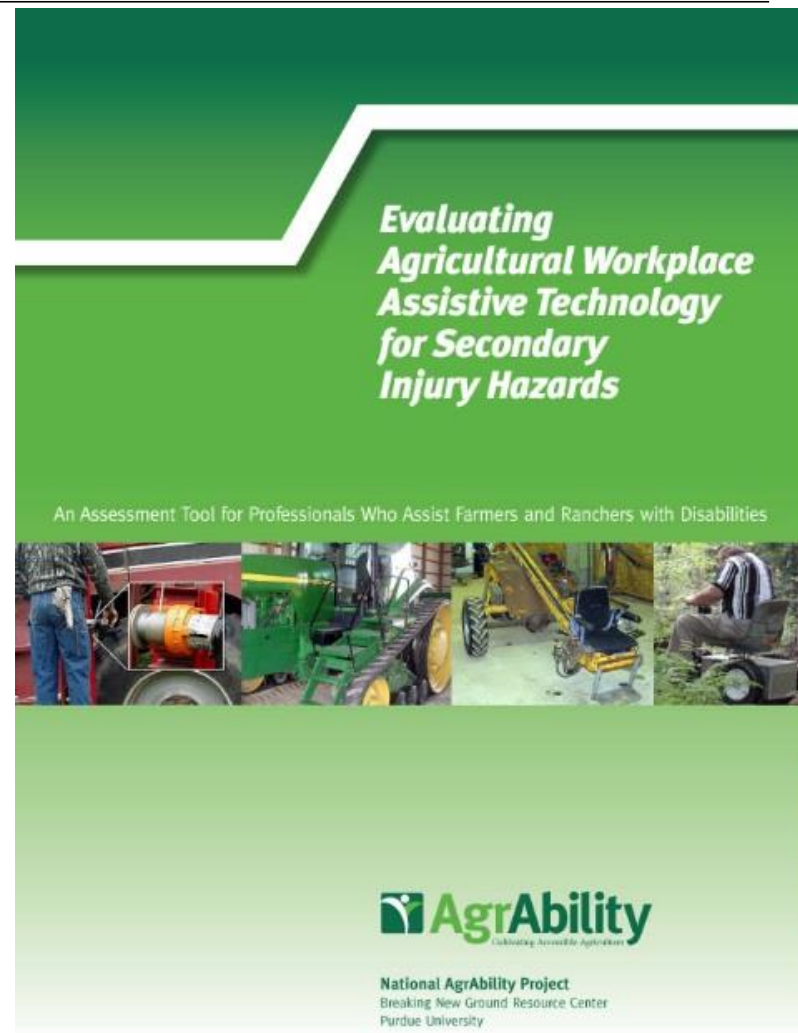
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# Overview

- Value and Purpose of the Assessment Tool
- Principles for Providing Assistive Technology
- Agricultural Worksite Assessment Tool
- Assistive Technology Assessment Steps
- Updates to Worksite Assessment Tool
- Assistive Technology Solutions
- Liability
- AT Do's and Don'ts
- Secondary Injury Assessment Tool



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# Value of Worksite Assessment

- To gain first-hand observations of potential barriers and resources
- To evaluate the client's ability to safely complete desired work-related tasks
- To inventory assets available as a basis for developing alternative solutions, including new enterprises

# Outcomes of Assessment

- Better understand farming operation, client's role on farm, and modifications needed
- Identify significant workplace barriers and functional limitations
- Opportunity to discuss desired modifications, task restructuring, or reassignment.
- Opportunity to identify specific client goals

# Purpose of the Assessment

The purpose of the worksite assessment is to not merely collect data but gather the information necessary to serve the client and his/her family more effectively. It is not a research, or a data collection instrument, but rather an “enabling” tool.

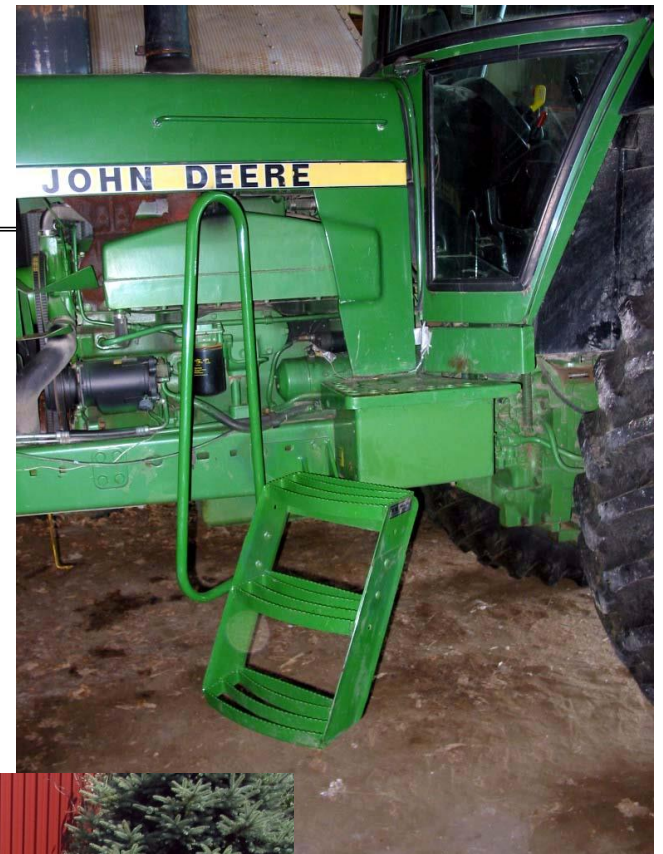
# AgrAbility

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# What is Assistive Technology? (AT)

Any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.  
(Assistive Technology Act of 1998)



# Principles for Providing AT

1. Do no harm
2. Keep the consumer and his goals as the central focus
3. Focus on functional abilities and potential
4. Offer simplest but still effective solutions

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# ADA Guidelines

- Private homes and farms are not covered by the ADA.
- Farm machinery are not covered by the ADA (SAE and ASABE standards do apply)
- However, when making recommendations, it is best to use the ADA Guidelines whenever possible.
- <http://www.ada.gov/>

# ADA Guideline Examples

- Ramp slope: 1 inch rise per 12 inches of run
- Thresholds no greater than  $\frac{3}{4}$  inch for wheelchairs (door thresholds)
- Doors no less than 32 inches wide
- Pathways at least 36 inches wide
- Reach no more than 52 inches up, sideways 24 inches, down 18 inches

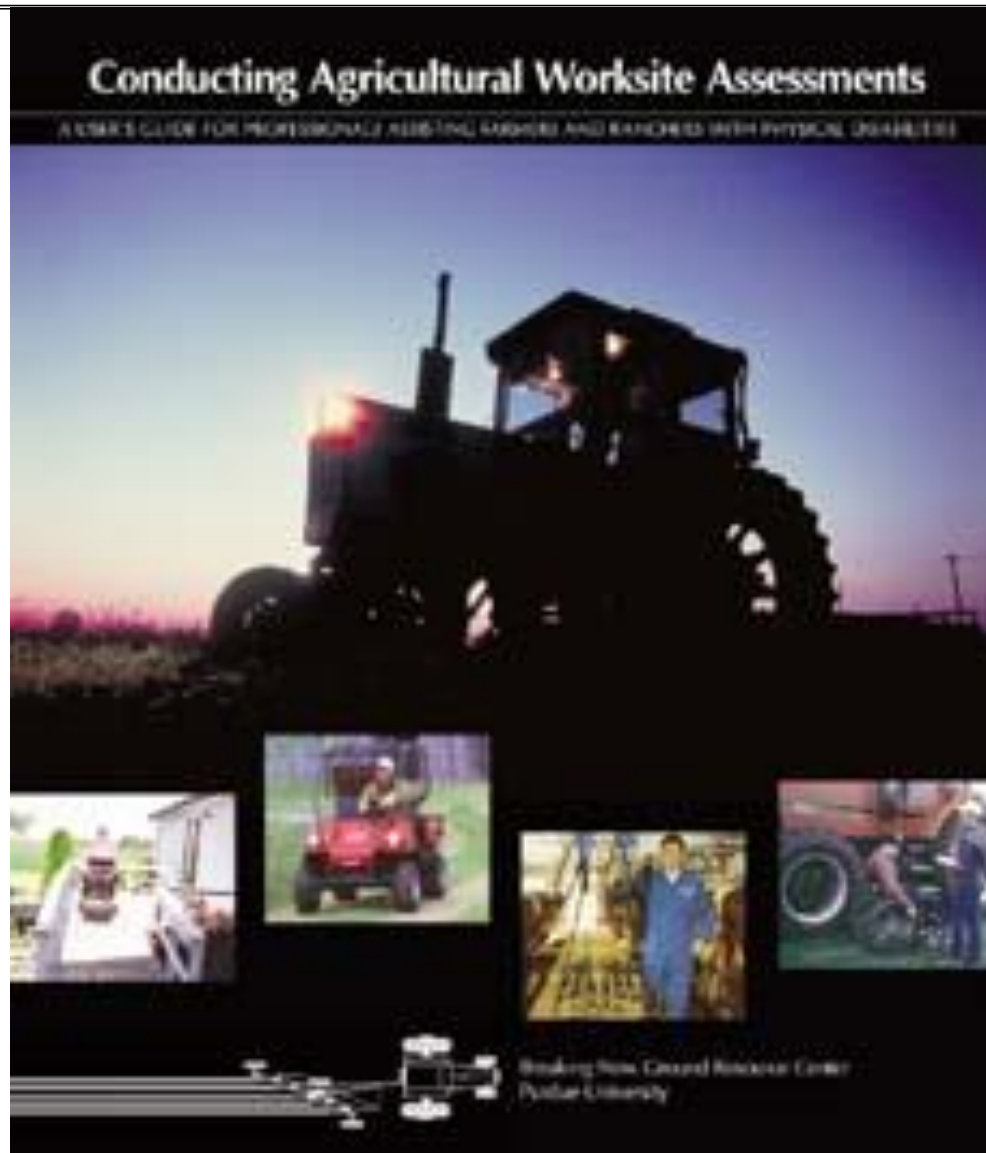


# Assessment Equipment

- Camera
- Clipboard
- Pad of paper
- Tape measure
- Angle finder
- Fish scale
- String level
- Assessment tool
- Wire brush
- Circuit tester
- Pliers
- Magnifying glass
- Utility Knife



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# Worksite Assessment Tool

*Conducting Agricultural Worksite  
Assessments: A User's Guide  
for Professionals Assisting  
Farmers and Ranchers with  
Physical Disabilities*

# Worksite Assessment Tool

- Who is it for?
  - Professionals
    - “Textbook” for new staff
      - Step-by-step approach
      - Designed to cover all the bases
    - “Playbook” for experienced staff
      - Improve assessment effectiveness
      - New angles, ideas

# Contents

- Preface (Including Liability Statement)
- 1. Value of Assessments
- 2. Preparing for and Conducting Assessments
- 3. What is the Tool and How to Use It
- 4. Explanation of Tool 'Questions'

# Contents Continued

- 5. Client Records—Confidentiality, etc.
- 6. Examples of Completed Assessments:  
spinal cord injury, arm amputation, leg  
amputation, back impairment
- 7. Related Resources
- 8. Appendix: Forms, Supplier List,  
Hotlines

## 2005 Edition

- Introduced Microsoft Access forms and electronic storage
- Provided Examples of Completed Forms
  - Client with a spinal cord Injury
  - Client with an arm amputation
  - Client with a leg amputation
  - Client with a back impairment

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## 2018-2019 Draft

- Update Assessment Tool narrative for current agricultural enterprises – GPS, auto steer, greenhouses
- Update Assessment Tool form for current agricultural enterprises and to duplicate demographic form on page 1
- Produce Electronic Assessment Tool to be used with a smart phone, tablet or laptop



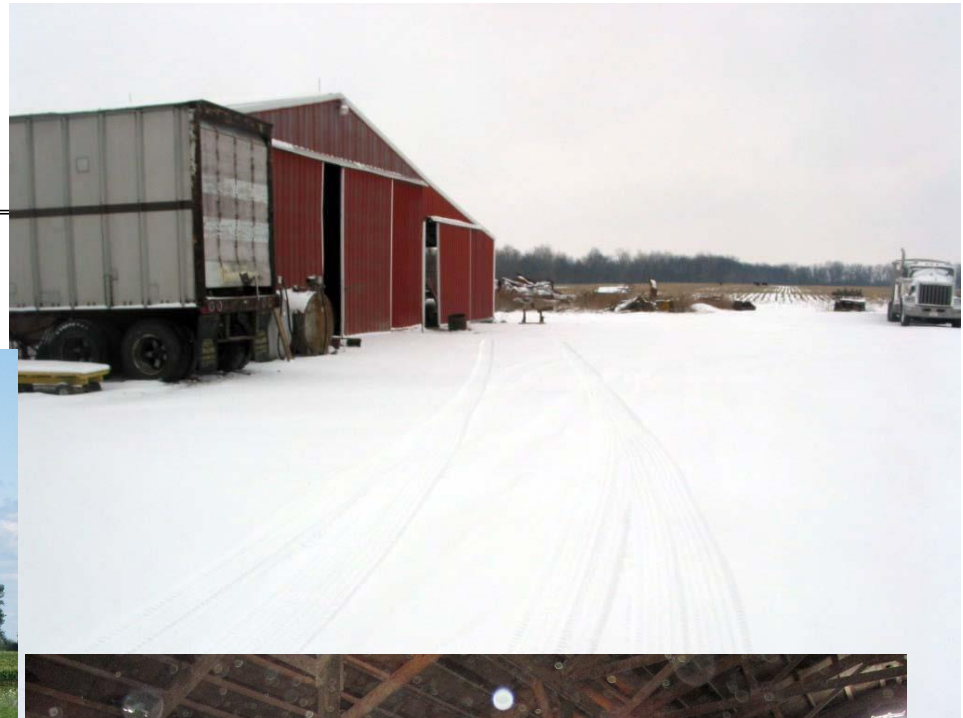
# The AT Assessment

## Step 1. Gather information

- Interview the consumer and team

## Step 2. Clarify the problems

- Interpret findings
- Integrate the information – consumer, tasks, technology, environment



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# The AT Assessment

Step 3. Produce a list of goals and desired outcomes

- Prioritize
- Should reflect consumer's needs and preferences

# The AT Assessment

Step 4. Identify and describe the generic attributes the solution will need.

- Develop several potential solutions
- Explore different options and strategies
- Perform simulations or trials of possible strategies

# The AT Assessment

## Step 4. Continued

- Consider both short and long term consequences
- Consider impact of changes or new equipment on existing function and lifestyle
- Assure compatibility with existing or anticipated equipment

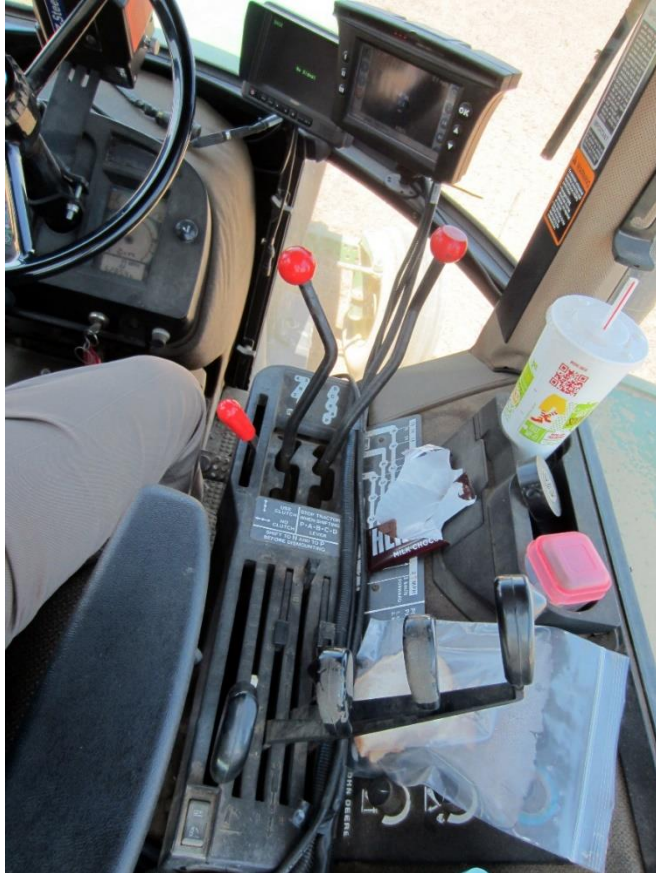
# The AT Assessment

Step 5. List several intervention options that meet the desirable outcomes

- Explore broad range of options
- Match desirable attributes to features of available equipment

## Step 5 Continued

- Consider using equipment of different levels of complexity (low tech to high tech, off-the-shelf to custom)
- Evaluate each for ability to match features desired and to meet goals
- Recognize appropriate and improper use of equipment and advise accordingly



# The AT Assessment

Step 6. Restate the preliminary goals.

- Revise goals that may have changed as a result of the information and analysis
- Assist to resolve trade-offs and prioritize goals
- List chosen goals

## Step 6 Continued

- Select a measurable outcome for each goal
- Gain consensus on the selected goals from the consumer and team members

# The AT Assessment

Step 7. Select the most desirable intervention option

- Confirm the effectiveness of the option to meet the established goals
- Gain consensus on the selected intervention



# The AT Assessment

## Step 8. Make recommendations

- Include specifics and details of new or modified equipment or technology
- Include training, follow-up, and other recommended services

## Step 8 Continued

- Include other appropriate solutions –
  - Surgery
  - Job training
  - Prosthetics, etc.
- Communicate the recommendations in a written report

## Funding AT

- *AgrAbility cannot provide direct funding or equipment*
- State Vocational Rehabilitation (VR)
- Veterans Administration (VA-VR)
- Non-profit organizations
- Foundations
- Local sources
- Crowd funding

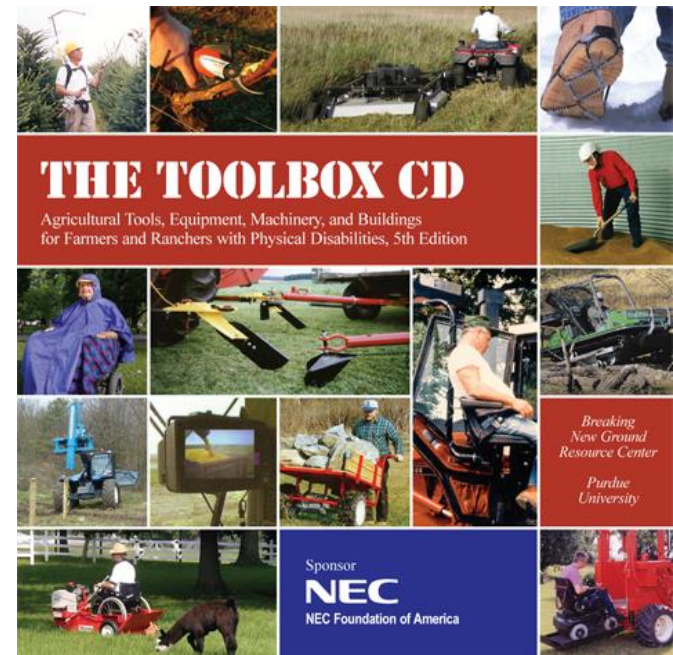
Before 



 After  
Stairway and Catwalk

# AT for Agriculture

- The Toolbox Assistive Technology Database
  - Available in print, CD, and online at [www.agrability.org/toolbox](http://www.agrability.org/toolbox)
- Many products are not specifically designed for use as AT



# Additional Resources

- [www.agrability.org/Resources](http://www.agrability.org/Resources)
  - Plowshares technical articles
  - Assistive Technology
  - Worksite and Vocational Issues
- Able Data: [www.abledata.com](http://www.abledata.com)
- Public Assistive Technology Database – Georgia Tech – [www.assistivetech.net](http://www.assistivetech.net)

# AgrAbility

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# Liability

- Liability is all about managing risk.
- You must be aware of both “professional” and “product” liability and/or risk.
- Agriculture is inherently risky
- Products and practices pose professional liability risks for AgrAbility staff



# Limiting Liability

- One of the best ways to manage or limit your liability or risk is to never practice outside your educational or “experiential” role.
- Document, document, document

# Limiting Liability

- Three categories of liability
  - Product design
  - Product manufacture or assembly
  - Product labeling – warnings and instructions

# Professional Liability Protection

- How to Protect Yourself
  - Professional liability insurance
  - Maintain proper and complete documentation
  - Follow the “safety hierarchy”

# Safety Hierarchy

“There are multiple layers or approaches for dealing with safety problems. The ones at the top of the safety hierarchy are best. You don’t have to exhaust all the possibilities at the top, but you need to do what you can do, to do the things at the top versus the things on the bottom of the safety hierarchy.”

# Safety Hierarchy

- Level 1 – Eliminate the hazard entirely
- Level 2 – Add safeguarding technology
- Level 3 – Use warning signs, labels, decals, etc.
- Level 4 – Thoroughly train and instruct the operator/user to deal with hazards
- Level 5 – Provide personal protective equipment



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## ***Evaluating Agricultural Workplace Assistive Technology for Secondary Injury Hazards***

An Assessment Tool for Professionals Who Assist Farmers and Ranchers with Disabilities

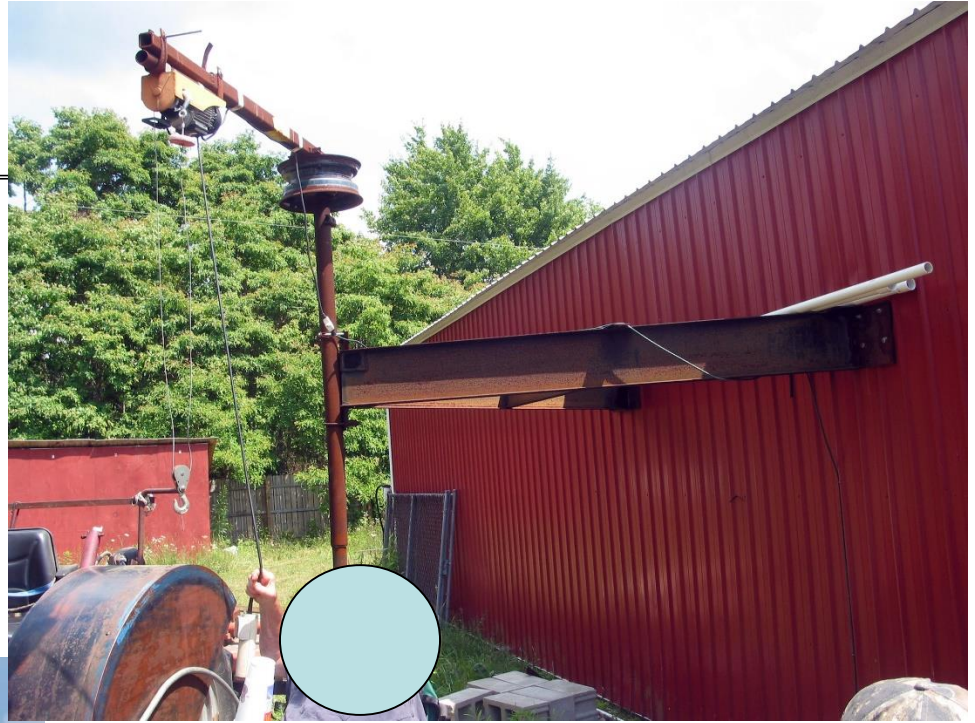


**National AgrAbility Project**  
Breaking New Ground Resource Center  
Purdue University

What is wrong  
with these  
pictures?



What is wrong  
with these  
pictures?



# Secondary Injury Assessment

- Provide an evaluation tool for funding agencies to estimate safety of home-made AT
- A training tool for rehab professionals
- Secondary injury prevention
- Help identify potential for injury
- Provide suggestions for remedial action

# Secondary Injury Assessment

- Steps in the process
- Reference sheets with descriptions and pictures
- Assessment example with worksheets filled out
- Copy ready assessment sheets

## Section III.

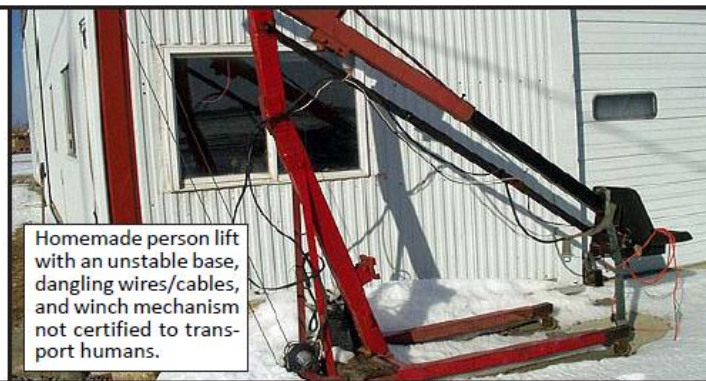
### EXPLANATION OF THE ASSISTIVE TECHNOLOGY ASSESSMENT ITEMS

Note: Each of the 55 items that fall under the eight categories in this reference section has been ascribed an injury-potential rating of high (H) or medium (M) or low (L), based on research studies involving farmers and rehabilitation professionals. The rating, which follows the item number, serves as an indication of the general risk level—e.g., 1 (H), 5 (M), 7 (L). For further information applicable to the safety of devices and work practices used in the agricultural workplace, see the list of resources in Appendix A. For a general farm/ranch inventory designed to help a client identify other workplace hazards, see Appendix B.

#### Items Related to the Construction/Components of an AT

1 (H) **General construction** — *Does the AT (whether fabricated or modified) appear to be of sturdy and stable construction?*

Sturdy, stable construction is important to any AT's long-term, reliable, and safe operation. Indications of good construction include: use of quality materials; overall integration of well-fitting component parts; properly welded or bolted joints; and the right size, grade, and number of fasteners at appropriate places. (Since adherence to building codes could be mandatory for construction, proper approval may have to be obtained before modifying a structure.)



2 (H) **Physical damage** — *Is there any physical damage (e.g., cracks, rust, rot, wear, corrosion, bends, dents) apparent that would affect performance or safety?*

Cracks indicate weakness, leading to breakage. Rust, rot, wear, and/or corrosion could indicate deterioration or weakness. Bends or dents can hinder proper functioning of moving parts during operation. Close investigation and measured judgment are required to



# Examples of Safety Concerns

# Questions?