IMPROVING FARM HOME ACCESSIBILITY, SAFETY, AND USE OF SPACE

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AGRABILITY VIRTUAL NATIONAL TRAINING WORKSHOP
WEDNESDAY, JANUARY 24 2018, 3:00 P.M. ET
BASIC WEBINAR INSTRUCTIONS

- Audio available through computer or phone.
- Check sound via Communicate menu at top left.
- Closed captions: use arrow to expand or contact the Media Viewer window. You may have to enter some log-in information.
- Expand/contract any of the windows in the right-hand column with the arrows. May need to do this to see video of presenter.
- Expand/contract the size of the right-hand column.
Questions and comments

- Click Chat icon at top right of screen (it should turn blue). Enter message in box, choose who to send it to, and click send. You may enter questions about the presentation at any time. Please send to “All Panelists”.

- In addition, during the Q & A period, if you have a web microphone, click the “Raise Hand” icon to indicate that you have a question. We will enable your microphone or phone connection.
BASIC WEBINAR INSTRUCTIONS

- 4 quick survey questions + opportunity to share comments
- Session recorded and archived with PowerPoint files at www.agrability.org/Online-Training
- Problems: use chat window or email jonesp@purdue.edu
**AgrAbility**: USDA-sponsored program that assists farmers, ranchers, and other agricultural workers with disabilities.

- Partners land-grant universities with disability services organizations. Currently 20 state projects

**National AgrAbility Project**: Led by Purdue’s Breaking New Ground Resource Center.

- Partners include:
  - Goodwill of the Finger Lakes
  - APRIL (Association of Programs for Rural Independent Living
  - Colorado State University
  - Washington State University

More information available at [www.agrability.org](http://www.agrability.org)
IMPROVING FARM HOME ACCESSIBILITY, SAFETY, AND USE OF SPACE

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University of New Mexico-Division of Occupational Therapy
OBJECTIVES FOR SESSION

- Participants will be able to identify major barriers to farm home access and use of space for farmers with mobility impairments.

- Participants will be able to use consumer-oriented home assessments to help farmers identify and prioritize rearrangement of physical spaces and make informed decisions about cost-effective and efficient modifications to improve safety and use of space.

- Participants will be able to share ideas with AgrAbility customers about low-cost, moderate cost, and high cost strategies to improve the farm home environment over an extended time to “age in place”.

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HOME IS WHERE THE HEART IS

- Farm is often the “home place”
- Generations of family born, grown up, passed down
- A place of attachment, memories, and treasured possessions
- A home reflects who we are, what we value, what we “do”
- Contemplating making changes to the home can be stressful and emotional
The Upside to Change

- Changes to the Farm home may:
  - Foster continued independence
  - Enjoyment of one’s home
  - Increase safety

- **Not** making changes may:
  - Increase risk of injury
  - Put others at risk
  - Make us a prisoner in our home because of structural barriers
Some Sobering Statistics

- 20,000 deaths, 7 million disabling injuries, and 20 million hospital trips in the U.S. each year. (WebMD, 2018; CDC, 2014)
- Majority of the deaths were from falls (Runyan & Casteel, 2004).

- Each year in the United States, an average of more than 7,000 adults 65 and older die as a result of a home injury. Falls are the leading cause of home injury death.

- When surveyed, the majority of people say they can’t think of anything to change in their homes that would make them safer.
More than 50% of all rural housing are manufactured homes

1.5 million or 5.8 percent of homes outside metropolitan areas are either moderately or severely substandard, a proportion slightly higher than the national rate

In some rural communities, especially on Native American lands and in Alaska, the incidence of homes lacking basic plumbing is more than 10 times the national level

Farm homes are often “older stock” with narrow stairways and doorways, lacking handrails, built on tall foundations, confined bathrooms spaces, and multi-story
MAKING OBSERVATIONS: COMMON HOME ACCESS BARRIERS

- Approach to the home:
  - What is the surface? Gravel, dirt, mud, paved sidewalk? Potholes?
  - Are sidewalks too narrow or buckling from tree roots?
  - Shrubs overhanging walkways?
  - Which direction is the house facing?
MAKING OBSERVATIONS: COMMON HOME ACCESS BARRIERS

- Entrances
  - Are there stairs? A ramp? Handrails?
  - Is there available and accessible porch lighting?
  - What kind of threshold is there?
  - How wide is the doorway?
  - What kind of door handles? What kind of door? Is there a storm door?
  - Is the construction sturdy?
MAKING OBSERVATIONS:
COMMON HOME ACCESS BARRIERS

- General Home Interior
  - Flooring?
  - Lighting?
  - Mobility access? Width of doorways? Interior stairs?
  - Location of outlets
  - Window coverings

- General safety
  - Tidy or cluttered? Trip hazards?
  - Smoke detectors? CO Detector? Fire extinguisher?
  - Emergency egress (front and rear of home, bedrooms)
  - Tornado country: ground level saferoom
MAKING OBSERVATIONS: BATHROOMS

- Bathrooms
  - Narrow doorways?
  - Sketch general layout of fixtures/take photos
  - Note whether bath/shower combo, step-in shower?
  - How high is tub? Nonslip surfaces in tub?
  - Is there any bathroom equipment already in place? (i.e. long handled shower hose, bath bench or chair, grab bars)
  - Lighting? Environmental adjustment (wall heater, heated towel bar? Venting?)
  - Rugs?
  - Can person sit or stand at the sink?
  - Safety: wet duty plug-ins and lighting? (Must be GFCI-protected)
MAKING OBSERVATIONS: BEDROOMS

- **Bedrooms**
  - Doorway?
  - Lighting?
  - Flooring?
  - Layout? Furnishing?
  - Bed? Access around bed?
  - Room for lift equipment?

- **Safety**
  - Emergency egress? CO & smoke detectors?
  - Emergency lighting?
  - Absence of trip hazards?
  - Presence of smoking materials?
MAKING OBSERVATIONS: KITCHENS

- Flooring? Condition of flooring?
- Lighting?
- Stove: gas or electric?
- Countertops? Cupboards?
- Clutter?
- Access to oven, refrigerator?
- Access to pantry?
- Faucets and sink?
- Knives and cooking utensils?
- Safety: fire extinguisher? Smoke detector?
MAKING OBSERVATIONS: LAUNDRY

- Are supplies accessible? Shelving in reach?
- Door handles to the area?
- Are appliances front loading and on pedestals?
- Are motion sensing lights installed?
- Are they GFCI outlets?
- Properly vented?
- Condition of flooring?
MOST COMMONLY NEEDED MODIFICATIONS

- Ramps
- Bathroom grab bars near the toilet and in the shower or tub
- Railings on both sides of a stairway
- Widening of door frames for greater access to common areas such as bathrooms, kitchens, and bedrooms
- Repair and removal of structural barriers: inadequate flooring, uneven transitions between flooring surfaces, and other non-structural barriers (i.e. furniture)
- Most common structural issues: limited floor space, limited wall space for grab bars, no wall stud where one is needed, unknown barriers within walls, financial limitations

P.S. Fact or fiction? Must follow ADA recommendations for private dwellings?
SOLUTION HIERARCHY FOR HOME MODS

- Solve the problem without purchasing additional equipment or making modifications (ex. Rearrange furnishings, remove trip hazards)

- Make simple changes using commercially available products (ex. change to lever door knobs, nonskid/nonslip products, increase lighting, add swing away hinges to doors to get an extra two inches of clearance, add safety equipment)

- Moderate modifications (ex. add ramps, reconfigure stairs, widen doorways, add commercially available environmental mods, shore up structure)

- Extensive modifications (ex. Bathroom remodel, adding safe room, refurbishment, new construction)
**RESPECT AUTONOMY**

- **Must** be a client and client family-driven process
- However, several **education** tools on the home mods process that you can provide:
  - AARP (in English or Spanish)
    - [https://www.aarp.org/content/dam/aarp/livable-communities/old-learn/housing/home-modifications-to-promote-independent-living-2010-aarp.pdf](https://www.aarp.org/content/dam/aarp/livable-communities/old-learn/housing/home-modifications-to-promote-independent-living-2010-aarp.pdf)
Is My Home "HomeFit"?

Read the following questions and check the box when your answer is "No." Your responses will help you identify how your home can become more "HomeFit."

(Skip any questions that don't apply or you're unsure about.)

- Is there at least one step-free entrance into your home?
- Are your staircases well lighted?
- Are your exterior door thresholds easy to see?
- Are there nonslip strips or nonslip mats in the bathtub and/or shower?
- Is your hot water heater set at or below 120°F?
- Are there smoke and carbon monoxide detectors on each floor of the home?
- Can a smoke and carbon monoxide detector be heard in every bedroom?
- Is a telephone easily accessible on every level of your home?
- Do you have flashlights in multiple rooms (in case of a power failure)?

- Does your kitchen have a work surface you can use while seated?
- Is there a fire extinguisher within reach of the oven or stove?
- Are your kitchen cabinets and shelves easy for you to reach?
- Are there all electrical and phone cords safely located (so they aren't a tripping hazard)?
- Do you have a shower with a step-free entry?
- Are the bathroom cabinets and shelves easy for you to reach?
- Do you have bathroom grab bars?
- Is there "blocking" (e.g., a wood stud or other solid surface) behind the bathtub walls so grab bars can be securely installed in the bathtub, shower and toilet areas?

- Does your kitchen have a lever, touch- or sensor-style faucet?
- Are there secure handrails on both sides of your stairs?
- Are your hallways well lighted? (Can you see what's in front of you and on the floor beneath you?)
- Does your entrance door have a secure slide latch or chain so you can open the door enough to speak with someone outside while not fully unlocking and opening the door?

- Use D-shaped handles, not round cabinet knobs
- Use rocker-style wall switches, not toggle switches
- Use lever handles, not round doorknobs or thumb-push handles
- Use lever, touch- or sensor-style faucets, not round turn handles or knobs
- Use no-step or compressible rubber threshold, not a raised or hard threshold

Because D-shaped handles are easier to grip
Because a rocker-style "push" switch is easier for everyone to use than an up-and-down "flip" switch
Because lever handles are easier to manage, even when your hands are full
Because round handles or knobs can be difficult to grip
Because a no-step or zero-step entry into the home lessens tripping hazards and allows easier access for wheelchairs and strollers
## ASSESSMENTS

- **CASPAR**
  - Comprehensive Assessment and Solution Process for Aging Residents
  - Consists of six sections:
    - Contact information
    - Client information
    - Problems in the home
    - Client goals
    - Description of the home
    - Summary information
  - Materials needed: CASPAR, Camera, 25’ tape measure
  - Download from: [https://www.ehls.com/national-grants/](https://www.ehls.com/national-grants/)

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**CLIENT INFORMATION**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Information</strong></td>
<td><strong>Client’s Medical Diagnoses or Disabilities</strong></td>
<td><strong>Mobility Aids Used</strong> (check all that apply)</td>
<td><strong>Functional Movement Abilities</strong></td>
</tr>
<tr>
<td>Age:</td>
<td>Primary medical diagnosis:</td>
<td>Canes(s) Type:</td>
<td>Step 1: Check the box corresponding to the client’s rating of difficulty when the following tasks are done without personal assistance.</td>
</tr>
<tr>
<td>(years)</td>
<td>Year of onset:</td>
<td>Crutches(s) Type:</td>
<td>Step 2: List any mobility aids used checked in item C above that is (are) used when doing each task.</td>
</tr>
<tr>
<td>Height:</td>
<td>Other health conditions, physical disabilities, cognitive/intellectual impairments or behavioral issues that effect client’s ability to do things in the home:</td>
<td>Walker Type:</td>
<td>Step 3: Provide any additional comments that further describe how each task is completed.</td>
</tr>
<tr>
<td>Weight:</td>
<td></td>
<td>Wheelchair Type:</td>
<td></td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.</td>
<td></td>
<td></td>
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<tr>
<td>F.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Functional Movement Abilities**

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Step 1: Client’s Rating</th>
<th>Step 2: Mobility Aids Used</th>
<th>Step 3: Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on light switch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Put a button</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Open a container</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Turn a doorknob</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Sit upright in a chair</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Transfer from chair to wheelchair</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Get up from chair and stand</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Walk 10 feet</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Walk across a room</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Step up on a curb</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Walk up three steps</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Walk up 10 steps or more</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Roll/propel wheelchair 50 ft</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Roll/propel wheelchair across a room</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
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Certified Aging in Place Specialists

The National Association of Home Builders (NAHB), in collaboration with AARP and other experts, developed the Certified Aging-in-Place Specialist (CAPS) designation, which is achieved through training and testing during a multicourse educational program.

CAPS:
- understands the unique needs of the older adult population
- knowledgeable about aging-in-place home modifications, common remodeling projects and solutions to common barriers.

CALL IN THE BIG GUNS

- Occupational Therapists
- Occupational therapists (OTs) are licensed health care professionals who understand the health and disability issues people face over a lifetime and know how to match the abilities of an individual with needed supports.
- OTs are skilled at performing home assessments that identify a person’s daily routines and activities and the barriers that impact performing them. An OT then works with the individual, the family and others to identify solutions for achieving the desired goals.
- Provide a home evaluation and recommend changes to increase safety and ease of use
- Identify furnishings, equipment and techniques that can help with regular or needed activities
- Collaborate with a home improvement contractor to develop a modification or build plan that will meet the needs of an individual or household
- Work with clients after the modifications, equipment or specialized products have been installed in order to ensure safe usage
RECOMMENDATIONS FOR CLIENTS NEEDING A CONTRACTOR

- Get a prescription or letter of medical necessity from a doctor or occupational therapist describing what modifications are needed

- Find an established local contractor (someone who cares about the quality of their work and reputation)

- Make sure they have insurance and is licensed to do the work required (ask for a copy)

- Does the contract have experience with disability retrofits? Ask for references! Call them! Get three bids

- Make sure they can stay within budget, ask for a written agreement

- NEVER pay all the money up front!!!!!! Make sure they get permitted from city/county
FINANCIAL RESOURCES TO MAKE RENOVATIONS

▪ Farmers Home Administration: grants and loans are available for rural low-income elders

▪ Local Community Development Department: many cities and towns use Community Development Block grants to help citizens maintain and upgrade their homes

▪ Local Housing/Energy Department: Low-Income Home Energy Assistance program and Weatherization Assistance Program for low-income persons

▪ Physician/Health Care Provider: funds from Medicare/Medicaid may be available for durable medical equipment with a doctor’s prescription
FINANCIAL RESOURCES TO MAKE RENOVATIONS

- Area Offices on Aging: funds from the Older Americans Act Title III often can be used to modify and repair homes
- Federal Government: Rural Housing Repair and Rehabilitation Loans
- Alternative Financing Programs, Equipment Exchange Programs, Tele to work Grants: Assistive Technology Projects & partners
- Veteran’s Administration: service connected disabilities are eligible for one-time home modifications up to a financial threshold
Q & A?

- Any final questions or comments?