

# CREATING A **HOME**FOR A LIFETIME



Kansas State University Agricultural Experiment Station and Cooperative Extension Service

**Fact Sheet** 

Mr. March is 75 years old and has lived with his wife in the same house for more than 50 years. Their house is on the land they farmed until retirement 10 years ago. A neighbor currently rents the farm ground. Mr. and Mrs. March love their home and several years ago added on a main floor bedroom so they wouldn't have to go upstairs to the bedroom. They hope to stay in the home for as long as possible. They are in reasonably good health and are active in their community. Mrs. March sometimes complains that her husband doesn't hear well, and she has to repeat things to him. When their adult children visit, they notice that sometimes he doesn't participate in the conversation or doesn't understand plans that have been made. They also notice that, although their parents have attractive windows looking out on the farm and the yard, the drapes are usually pulled. If they open them, Mr. March closes them when he comes into the room.

Two years ago, Mr. March had knee replacement surgery and had to use a walker, and then a cane, for several weeks while recuperating. Because there are several steps leading to both the front door and the door leading to the attached garage, he had difficulty getting in and out of the house. The bathroom is small, and he had trouble using the bathtub/shower during that time.

Mr. and Mrs. March may be typical of some individuals in their retirement years. They are experiencing age-related physiological changes that present some problems in daily activities. However, they have tried to make modifications to their home and in the way they do things so they can remain independent.

#### When Are We Old?

People age at different rates; the process is unique to each individual, based on a number of variables. Today's society has been termed by some to be "ageless" because people are not restricted to accomplishing certain goals at certain times. For instance, a person at age 40 may be a grandparent or may have just become a parent for the first time.

So how does one know when one is old? According to one definition, one is old when it becomes an achievement to do thoughtfully, step by step, what one once did instinctively.

The following list includes activities, usually taken for granted, that people over 55 and living in their homes identified as problems. These activities of daily living were considered problems either because they took much longer or because they could no longer be done by some individuals. Not all of the activities are absolutely necessary for everyday living, but when five to 10 of them cannot be done, they limit functional independence.

Prepared by Marilyn Bode, Extension Housing Specialist, Department of Apparel, Textiles and Interior Design, Kansas State University.

## **Problem Activities of Daily Living**

- Opening medical packages
- Reading product labels
- Reaching high things
- Fastening buttons, snaps and zippers
- Vacuuming and dusting
- Going up and down stairs
- Cleaning bathtubs and sinks
- Washing and waxing floors
- Putting clothes over one's head

- Putting on shoes, socks and stockings
- Carrying purchases home
- Using tools
- Fearing accidents with no one there to help
- Using the shower or bathtub
- Tying shoelaces, bows and neckties
- Moving around the house without slipping and falling

## **Age-Related Changes**

Based on family traits and environment, changes related to aging vary with each individual in degree and severity. Age-related sensory changes occur gradually and are not as dramatic as disabilities that occur suddenly through accidents or other health crises. Because these changes occur slowly, people are able to adapt. If there is a simultaneous change in different sensory systems, it can seem overwhelming and result in anxiety and feelings of lost independence. For individuals whose home environment makes it difficult to function independently, the sensory losses can lead to feelings of isolation and hopelessness. A supportive environment can help compensate for sensory loss and physiological changes.

The following chart lists some common age-related changes and adaptations to help compensate.

### Age-Related Sensory and Physiological Changes and Adaptations for Accessibility in the Home

Age-Related Changes	Adaptations
Vision	
Decreased ability to see objects clearly	Use large, contrasting lettering on clocks, thermostats, and appliance dials. Post emergency numbers near telephone in large letters.
Increased difficulty with glare	Vinyl floors with some texture and in slightly darker shades cause less glare than smooth, light floors. Use a low-buffed wax finish to reduce glare. Carpet causes less glare. For window treatments, select glare-reducing, translucent shades. Trees and awnings near windows help reduce glare from the sun. Do not use exposed light bulbs.
Difficulty seeing in dim or reduced light; may need three times the light, but with no glare	Increase wattage in hanging lamps and table lamps, but avoid glare by placing at proper height and using shades. Use a night-light in the bedroom or bathroom. Install under-cabinet lights in the kitchen and work areas and adequate lighting in reading areas, stairs and entryways. Paint walls a light color to reflect light.
Delayed sight recovery from light to dark or dark to light areas	Keep clutter out of the entry area, where it may be hazardous if not seen while eyes are adjust- ing to indoor light. Locate electric switches within easy reach of the entrance.



Dishwashers placed higher than average help users with reduced ability to bend or stoop, or who have limited flexibility or mobility.

# Age-Related Sensory and Physiological Changes and Adaptations for Accessibility in the Home

and Adaptations for Accessibility in the Home		
Age-Related Changes	Adaptations	
Vision (continued)		
Decreased ability to discern colors at blue end of spectrum	Use contrast to provide color cues. <i>Examples:</i> Handrail should contrast with wall color, stair steps and countertops can be edged with a contrasting color.	
Decreased ability to judge distances	Use contrasting edging on steps, and provide good lighting for stairways.	
Difficulties with figure ground	Use nonpatterned carpet or vinyl flooring.	
Reduced upward gaze	Pictures should be hung low enough to be in visual field.	
Auditory		
Decreased hearing ability	Use devices such as amplified phones, TV telecaptioning.	
Inability to hear high- frequency sounds	Install blinking lights for smoke detectors, telephone or doorbell. Use telephones that "ring" at a different frequency. Adjust the television so the volume can be turned down by increasing the treble relative to the bass.	
Difficulty filtering out pertinent sound from background noise	Carpet, acoustical tile, drapes and wall hangings that absorb sound help reduce background noise. When possible, reduce noise produced by fans, air conditioners, traffic, music, and appliances. Use a remote control with the television so the sound level can be reduced quickly when needed.	
Temperature		
Decreased ability to adapt to changes in temperature, causing susceptibility to hypothermia	Keep rooms warm enough. Electric space heaters can warm one area without overheating the whole house. (Do not use unventilated combustion heaters.) Caulking, weatherstripping and draperies can reduce drafts from doors and windows. Turn water heater down (no higher than 120°F) to reduce burns.	
Other physiological changes		
Reduced strength in legs and arms	Install grab bars around the toilet and bath. Keep steps to a minimum by having sleeping, eating, and bathing areas on one floor. Use sturdy handrails on both sides of stairs. Store heavy items on reachable shelves. Install easy-to-open windows.	
Reduced strength in hands and fingers and ability to grasp and turn	Use lever-type door handles and controls on faucets. D-shaped handles on cupboard doors and appliances are easier to grasp than knobs. Install large appliance dials (1½ inches or greater) or push-button controls on appliances. Use "touch-on, touch-off" table lamps and rocker-type switch plates.	

#### 4 PARTICIPANT'S GUIDE

# Age-Related Sensory and Physiological Changes and Adaptations for Accessibility in the Home



Lowered cooktops and countertops with openings underneath allow use while seated.



Store items in cabinets where they can be easily reached.

Age-Related Changes	Adaptations	
Other physiological changes, continued		
Reduced ability to bend and stoop	Locate electrical outlets at least 15 inches above the floor. Install pull-out shelves in base cabinets and install wall-mounted ovens at a height that does not require bending to remove food.  Locate dishwasher and front-loading washer and dryer higher than the normal height. Use side-by-side refrigerators to provide storage space without bending or reaching.	
Decreased flexibility for reaching	Store items at heights where they can be easily reached. Choose appliances with controls within easy reach (front or side). Use a sturdy step stool, if needed. Place a phone and light within easy reach of the bed. Install closet rods that are adjustable or located at a lower position. Be sure drapery pulls are easy to reach.	
Tires easily	Adjust some kitchen and laundry work surfaces to lower levels to be used while seated. Use a tub or shower seat. Install bathroom mirrors low enough to be used while seated. Buy chairs with arms and firm cushions that are sturdy, comfortable, and easy to get out of.	
Limited mobility; use of wheelchairs, canes, walkers, or crutches	Make sure door openings are at least 32 inches wide, hallways at least 36 inches wide, and thresholds level or beveled to no more than ½ inch above the floor level. Ramps should slope no more than 1:20. Eliminate throw rugs. Install grab bars in bathrooms. Lowered work spaces should be open underneath. Bathrooms must be large enough for a wheelchair.	

Adapted from: Margaret Christenson, Geriatric Environmental Concepts, 1986; Wanda Olson, Usability of Appliance Features by Persons with Disabilities, Proceedings of the 39th Annual International Appliance Technical Conference, 1988, pp. 203-214; Bettyann B. Raschko, Housing Interiors for the Disabled and Elderly, New York: Van Nostrand Renhold Co., 1982.

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