

## **HED: Back home after a fall-related injury?**

### **DEK: Don't fall for any safety shortcuts**

Staying safe and sound after you've been hurt in a serious tumble can be easy as falling off a log – and a lot less painful.

In fact, a [recent study confirmed that if everyone made one in-home change](#), Americans could avert up to 40,000 medically-treated spills and save up to \$440 million in direct medical costs each year.

"In my experience, there should be two top priorities after a fall; good lighting and eliminating all tripping hazards, like rugs and low furniture," suggests [Brad Manor](#), Ph.D., Director of the Harvard-affiliated Mobility and Brain Function Program at the Hinda and Arthur Marcus Institute for Aging Research.

Of course, other factors are just as critical. Sticking to a rehabilitation program, undertaking doctor-approved exercises, and maintaining healthy vision and hearing help keep former patients strong and steady. But everything begins with a safe, sound living space.

Your occupational, physical, or rehabilitation therapist can help pinpoint potential trouble areas. And there are abundant internet resources for individuals and builders, including those available [The Fall Prevention Center of Excellence](#) (FPCE) at the University of Southern California Leonard Davis School of Gerontology and the .

Whether you launch into major renovations or immediate quick-fixes, any good safety program should incorporate many of the following strategies.

#### Outside the house

- Examine the steps leading to your house. Extend them if they're not about one-foot deep to accommodate the full foot.
- Place reflective and slip-proof markers on each step and consider adding railings alongside the entryway stairs.
- Install motion-sensitive lighting outside your entryway to fully illuminate the porch and, if possible, allow at least five square feet of space outside the main door.
- Remove obstacles on the porch and double-check that the walking surface is non-slip.

#### In the living room:

- Leave lots of open, furniture-free space to maneuver around the room.
- Check sofa and chair armrests. Sturdy armrests can provide critical support if you struggle to get to your feet, but if only they can handle your weight. Reinforce them if necessary.

- Check for other ‘braceable’ solid objects around the room. As [NY Visiting Nurse Association](#) Senior Physical Therapist William Campbell, PhD. cautions, dizziness upon standing is a leading cause of fainting. “It’s called orthostatic hypotension and you don’t always know it’s happening. So, in addition to having an easy way to stand, you should think about pausing for a few seconds whenever you get up.”
- Place reachable, easy to operate lamps and light switches near seating areas.

### In the bathroom

Bathrooms account for the majority of in-home falls. To help overcome some sticky problems:

- Invest in nonslip rubber mats by the sink, the toilet, and outside the shower or bathtub.
- Place non-slip strips or decals on the shower or bath floor, or consider replacing surfaces with non-slip tiles.
- Replace current hot water spigots with thermostatic or anti-scald controls
- Add grab bars inside the shower or bath and alongside the toilet.
- Buy a raised, padded toilet seat with handles.
- Use a hand-held shower hose instead of a stationary nozzle. Similarly, place a soap dispenser nearby, so you never have to fish for a slippery bar. Warns Campbell, “A common cause of falls is reaching beyond your base of support instead of taking a couple steps. And that can be treacherous in the shower.”
- If your bath or shower area doesn’t have built-in seating, purchase a heavy in-shower seat with sturdy hand rails.
- Buy suction-bottomed sandals, a magnifying mirror, and a pill bottle magnifier to make bathroom life easier.

### In the kitchen

Preparing food can be a juggling act for the most mobile chefs. For those with some physical limitations, it can be truly hazardous.

“Most falls occur in stages, so people will try to grab on to something,” says Manor. So, avoid the kind of risk, he recommends ensuring there are always solid handholds within reaching distance, and doing as much as possible while seated. He also suggests that you:

- Move the heaviest and most-used kitchen items to the lowest shelves.
- Put rotating trays (lazy Susans) in hard-to-access corners or deep cabinets.
- Invest in a ‘grabber’ device to extend reach.
- If you occasionally use a stool, make sure it’s heavy-duty, has a solid center of gravity and features strong handles all around.
- Create preparation and work areas that are waist-high to accommodate a seated cook.

### Throughout the house

- Replace light switches and thermostats with rocker-type or pressure-sensitive alternatives.
- If possible, lower switches to a wheelchair-accessible level.
- Install lever-style, one-handed doorknobs instead of turning bulbs that require a solid grip.
- Secure or hide cords that could present a tripping hazard.

- Measure doorways to ensure a wheelchair can clear them. If necessary, have a carpenter widen them accordingly.
- Amp up the lighting and keep it as consistent from room to room. Aging eyes don't adjust as quickly to brightness changes. Choose conventional light bulbs with the highest allowable wattage or use the appropriate LED lights.
- Examine corners and small spaces for shadows that could conceal hazards.
- Inventory the house for clutter or walking obstacles. Where they tend to collect, place clearly-marked, highly visible storage containers that you can access without twisting yourself into a pretzel.
- Minimize the number of throw and area rugs. Where they remain, secure them with double-sided carpet tape or rubber matting. Remember that unsecured rugs, loose floor boards, or uneven surfaces pose a substantial tripping risk.
- On stairways, clearly mark each step with reflective tape, a contrasting border, or both.
- Place light switches at both ends of the stairway.
- If possible, extend handrails beyond both ends of the stairs for additional grabbing space.

### Long-term changes

If you have the means, home renovations offer the ultimate solution. [The American Home Builders](#) recommends using a certified specialist to plan and update living areas, and there are abundant resources for creating [the Lifetime Home](#). Their basic changes, designed to reduce the instability created by having to stoop or stretch, include:

- Replace entryway steps with an incline or ramp that leads to a beveled area. The slope should not exceed a one-inch rise for each 12-inches of length.
- Expand the landing-area outside the front door to beyond five square feet and substitute slip-resistant flooring for ordinary surfaces.
- Create extra-wide doorways between all rooms.
- Construct waist-level workstations in the kitchen and elsewhere to minimize standing.
- Lower the uppermost cabinets by about three inches for better accessibility.
- Lower sinks and other appliances accordingly, and install task lights over heavily used areas.
- Build seating directly into the bath or shower, add plenty of grab bars, and ensure everything is easily reachable.
- Replace shower or tub standing areas with non-stick tiling.
- Install motion-sensitive lights inside and outside the home, particularly around such heavily-travelled routes as the path from bedroom to bathroom.
- Place outlets at least 18 to 24 inches above the floor. light switches 36 to 44 inches above the floor, and thermostats no higher than 48 inches off the floor.
- Add movie-theater style lighting, non-slip strips, clear markings and different colors to any remaining stairways to make each step clearly visible
- In a laundry room, use a front-loading washer and dryer raised 12 – 15 inches above the floor.

### Smart rehab

Of course, environmental changes can only do so much. Chronic medical conditions, muscle weakness, dizziness, and the side-effects of commonly-prescribed medications can compromise balance and steadiness during the post-injury period. That's why sticking to a rehab and therapy program is every bit as essential as creating a fall-proof home.

“We need to make sure patients get motivated and engaged,” says UCLA internist and geriatric medicine specialist [David Reuben, MD](#). “There’s evidence that exercise, balance training, vision correction, and trying to get off some medications can reduce the risk of falls. And despite the fact that these things sound so basic and simple, they’re not being routinely implemented.”

As head of the multiyear [STRIDE](#) fall reduction project (Strategies to Reduce Injuries and Develop confidence in Elders) he’s determined to change that. And others in the fall-prevention world share his commitment, and growing sense of optimism. They know awareness and attention can help send the number of serious slips falling, while proving the [National Council on Aging](#)’s conclusion – that falls are not an inevitable result of aging – is totally correct.

---