

# FALL PREVENTION

## *In-home Environmental Changes for Aging Adults with Parkinson's Disease*

### WHAT IS THE BIG ISSUE?

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It is a common trend that as we age, we begin to need more assistance in every day tasks. We find ourselves unable to move as fast or be as steady as before. Our bodies go through a lot of changes as we get older, some being more severe than others, such as individuals with Parkinson's disease. The symptoms of Parkinson's disease can lead those individuals to lose their independence and start depending on others for care. As the disease progresses, these individuals become more at risk for falls. Although individuals with Parkinson's disease may have more challenges, there are many home modifications that can be done to help maintain safety and decrease their risk for falls.



## **What is Parkinson's Disease?**

To begin, let's first describe what Parkinson's disease is. This disease is a neuromuscular disease, meaning it affects the use of your muscles. Parkinson's is a "progressively debilitating disease and often leads to total dependence on others for care" (Soshana et al., 1997 p 55). There are a few classic symptoms that relate to Parkinson's disease. These include rigidity, tremor, difficulty starting movement (akinesia), or slowness in voluntary movement (bradykinesia) (Soshana et al. 1997). These are only a few symptoms of Parkinson's disease; other symptoms may vary based on the individual.

## **Why are Falls Riskier for those with Parkinson's Disease?**

Each and every day, we may find ourselves walking and trip on a curb that we didn't see. For people at a younger age we might be able to catch ourselves before we fall to the ground. For the older individuals with Parkinson's disease, they might not be so lucky. It has been found that "falls are a major cause of death in older persons" (Morley, 2002 p 492). In addition, it has been found that falls are the main cause of hip fractures and the fear of falling. It can also be linked to elders becoming isolated with symptoms of depression (Morley, 2002). The classic symptoms of Parkinson's disease put these individuals at a higher risk. Rigidity, tremors, and akinesia may not allow the individual to raise their foot up high enough to clear an object. Bradykinesia prevents them from reacting fast enough in order to catch their fall. Knowing these facts, it is important to help prevent falls for older adults, especially for those with Parkinson's disease.

## What Areas of everyday occupation can it interfere with?

The symptoms of Parkinson's disease have the ability to make every day activities more challenging. The following list is made up of the areas of everyday occupations that may be interfered with due to Parkinson's disease and the high risk of falls:

- Walking
- Activities of Daily Living
  - Dressing, bathing, eating, etc.
- Instrumental Activities of Daily Living
  - Walking the dog, gardening, cleaning the house etc.
- Leisure Activities
  - Gardening, going for walks, shopping, etc.

## In-home Environmental Changes to Prevent Falls

- **Raised Toilet Seats**
  - Raised toilet seats can help to prevent falls in the bathroom. They provide a higher surface to stand up from after using the bathroom. They come with armrests (below on the right) or without (below on the left). To use these seats, simply place the raised toilet seat on your toilet at home. Some seats may require you to lift the actual toilet seat up. \*See Binson's Medical Equipment and Supplies under helpful resources to purchase\*



- **Tub Transfer Bench/Shower Chair**

- These assistive devices will help to prevent falls in the shower or bathtub. Water and soap cause the floor of the shower/tub to become slippery, making it a place where falls are a high risk. A tub transfer bench/shower chair allows for a safe transfer in and out of the shower. These devices can also help to conserve energy when bathing. \*See Binson's Medical Equipment and Supplies under helpful resources to purchase\*



Tub Transfer Bench



Shower Chair

- **Bedside Commode**

- Getting up in the middle of the night can be difficult for those with Parkinson's disease. Due to rigidity, it takes these individual's body's a little while to warm up before having good movement. A bedside commode will help with nighttime urgency to use the restroom. The individual won't have to walk all the way to the bathroom, decreasing the risk of a fall. \*See Binson's Medical Equipment and Supplies under helpful resources to purchase\*



- **Grab Bars**

- Grab bars are helpful in preventing falls in the bathroom and shower. They provide an additional support when getting up and down from the toilet or getting in and out of the shower. \*See Binson's Medical Equipment and Supplies under helpful resources to purchase\*



- **Eliminate Rugs** – Rugs in the home can increase the likelihood of a fall. Eliminate all rugs in the home if possible. If this is not possible, make sure you have rugs that will not easily slip or trip on.



- **Assistive Devices for Ambulation**

- Devices for ambulation include (but not all) walkers, canes, and wheelchairs. These devices will help with unsteadiness while walking around your household. Talk with your primary care physician and physical therapist to determine which device is best for you.  
\*See Binson’s Medical Equipment and Supplies under helpful resources to purchase\*



Walker



Cane



Wheelchair

- **Education on Safety and Energy Conservation**

- Being educated on safety in the home environment will help to prevent falls. Individuals with Parkinson’s disease need to be aware and take their symptom limitations into consideration. The two websites below have good educational tools to help understand Parkinson’s and the risk for falls.
  - [https://www.cdc.gov/steady/pdf/STEADI-Brochure-CheckForSafety-508.pdf?utm\\_source=All&utm\\_medium=social&utm\\_campaign=national%20safety%20month&utm\\_term=na&utm\\_content=na](https://www.cdc.gov/steady/pdf/STEADI-Brochure-CheckForSafety-508.pdf?utm_source=All&utm_medium=social&utm_campaign=national%20safety%20month&utm_term=na&utm_content=na)
  - <https://www.parkinson.org/pd-library/fact-sheets/Falls-Prevention>

- **Energy Conservation**

- Energy conservation can help to reduce falls. Taking breaks, sitting down while doing activities, and time of day will all help to conserve energy. Falls can occur due to fatigue and being unable to pick up your feet. Below is a resource for energy conservation techniques.
  - <https://www.epsom-sthelier.nhs.uk/download.cfm?doc=docm93jjjm4n1281.pdf&ver=1870>

## Helpful Resources

- CDC's Home Fall Prevention Checklist for Older Adults
  - [https://www.cdc.gov/steady/pdf/STEADI-Brochure-CheckForSafety-508.pdf?utm\\_source=All&utm\\_medium=social&utm\\_campaign=national%20safety%20month&utm\\_term=na&utm\\_content=na](https://www.cdc.gov/steady/pdf/STEADI-Brochure-CheckForSafety-508.pdf?utm_source=All&utm_medium=social&utm_campaign=national%20safety%20month&utm_term=na&utm_content=na)
- Parkinson's Foundation website for fall prevention
  - <https://www.parkinson.org/pd-library/fact-sheets/Falls-Prevention>
- Binson's Medical Equipment and Supplies
  - At Binson's you will find all of the adaptive equipment listed above, such as, raised toilet seat, tub transfer bench, bedside commode, grab bars, and assistive devices for ambulation
  - [http://www.binsons.com/cart\\_index.html](http://www.binsons.com/cart_index.html)
- Depression support groups
  - <https://www.depressioncenter.org/patient-resources/support-groups>
- Home Care Help
  - <http://www.arcadiahomecare.com>
- Talk to your Primary Care Doctor for more tips on fall prevention

## What Professional/services can be helpful?

- Occupational Therapy (OT)
  - OT's "actively involve the client in the fall prevention process to better understand individual fall risk factors and intervention priorities. Teaching clients how to identify and solve problems is an important part of the occupational therapy process" (AOTA, 2020).
- Physical Therapy (PT)
  - PT can help to keep your muscles strong and keep you active. They will make sure you have the correct mobility tools to safely walk throughout your home. Maintaining strength will help to prevent falls at home.
- Home Health Aides
  - Home health aides can be useful in many ways. Their job is to come in your home and help you in any way needed. They can clean hard to reach places, remind you to take medications, or take you for a walk. This profession can even come in to be a companion, someone to talk to if you are living at home alone. An example of a company is Arcadia Home Care and Staffing.
  - <http://www.arcadiahomecare.com>

## Why Should I do these Environmental Changes?

Above, there are many good interventions that will help improve your occupational engagement. It is important to maintain safety and prevent falls while engaging in every day activities. One category that these home modifications relate to is self-care. By adapting your home to the medications, you are allowing yourself to maintain healthy and preventing injury due to a fall. The bathroom equipment will help you prevent falls while completing your basic activities of daily living. Education of safety and energy conservation fall under learning and applying knowledge. It is important that you understand why these modifications are helping you and then having the ability to apply the conservation techniques throughout your day. Another area these modifications

hit is activities and participation, specifically mobility and the safety involved with it.

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## References

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