

# CHRONIC DISEASE PREVENTION & HEALTH PROMOTION

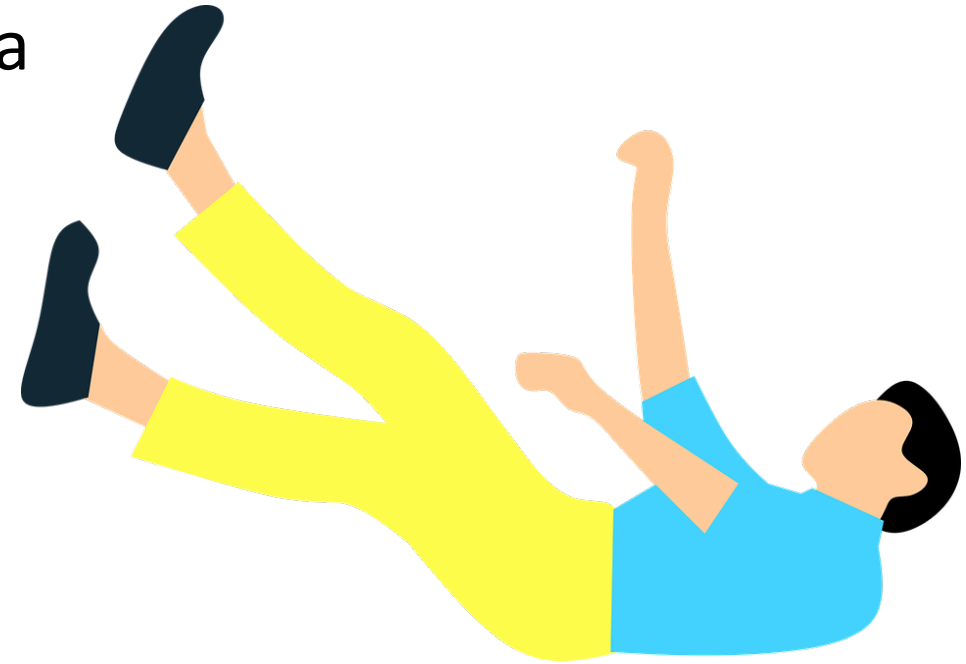
## Fall Prevention

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October 2, 2024

# Overview: What is a fall?

- A person experiences a fall when they come to a rest on the ground or the floor.
- Adults will have un-intentionally come to a rest on the ground level
  - Falls are not defined as the result of experiencing sudden illness or a medical condition such as a stroke or heart attack.
  - Falls are not defined as the result of encountering an act of nature such as an earthquake or other natural hazard.



# Overview: Why learn about falls?



- Quality of life greatly decreases after someone experiences a fall.
- 60% of people who fall will have a decreased level of social and physical activity.
- 15% of people who fall will significantly restrict their activities.
- These decisions result in people losing their independence and compromising every part of their regular life.
- 3 in 10 people who fall will have an increased risk of requiring assisted living.

# Overview: What is the goal of fall prevention?

The goal of fall prevention is to reduce the incidence and severity of falls among older adults and individuals at high risk, to improve their overall safety, health, and quality of life. Fall prevention aims to:

- Reduce fall incidence
- Decrease injury severity
- Enhance mobility and independence
- Improve quality of life
- Promote safe environments
- Increase awareness and education

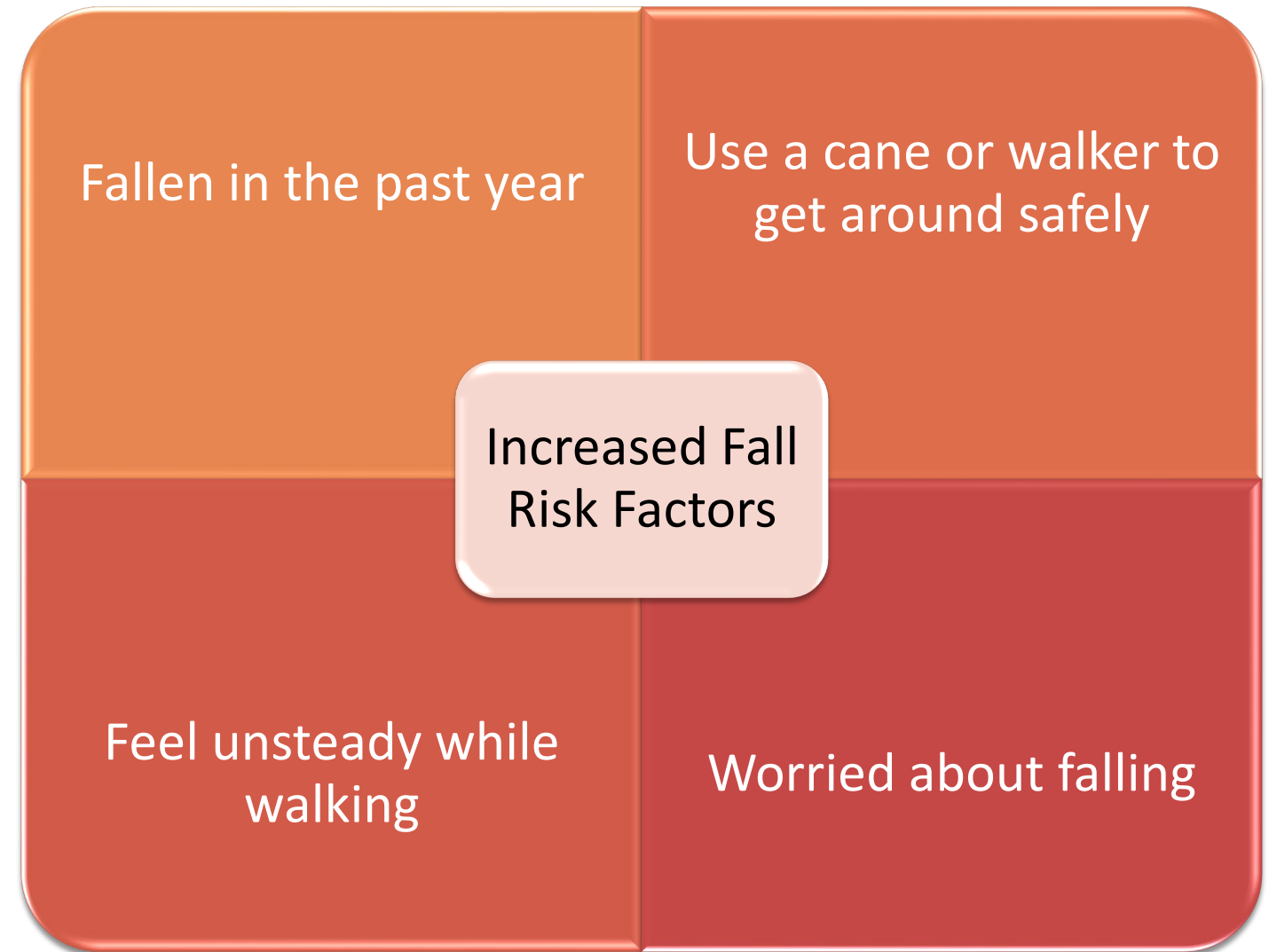
# Overview: Risk Factors of a fall

- People who are at the highest risk of falls include people who experience:
  - Abnormal balance
  - Difficulty walking
  - Low strength with functional limitations which makes it hard to conduct activities of daily living.
  - People who have medical issues:
    - Poor vision, diabetes, dizziness, depression, dementia, incontinence, arthritis, pain.
- Medications affect fall risk.
  - Taking four or more medications of any kind.
    - Including, sleeping medication, medication affecting the brain, and over the counter medication.



# Overview: Risk factors of a fall

- The more risk factors someone has, the higher likely they will experience a fall.
- Stay healthy and independent by checking your risk for a fall
- [NCOA Falls Free Check Up](#)





Fall data



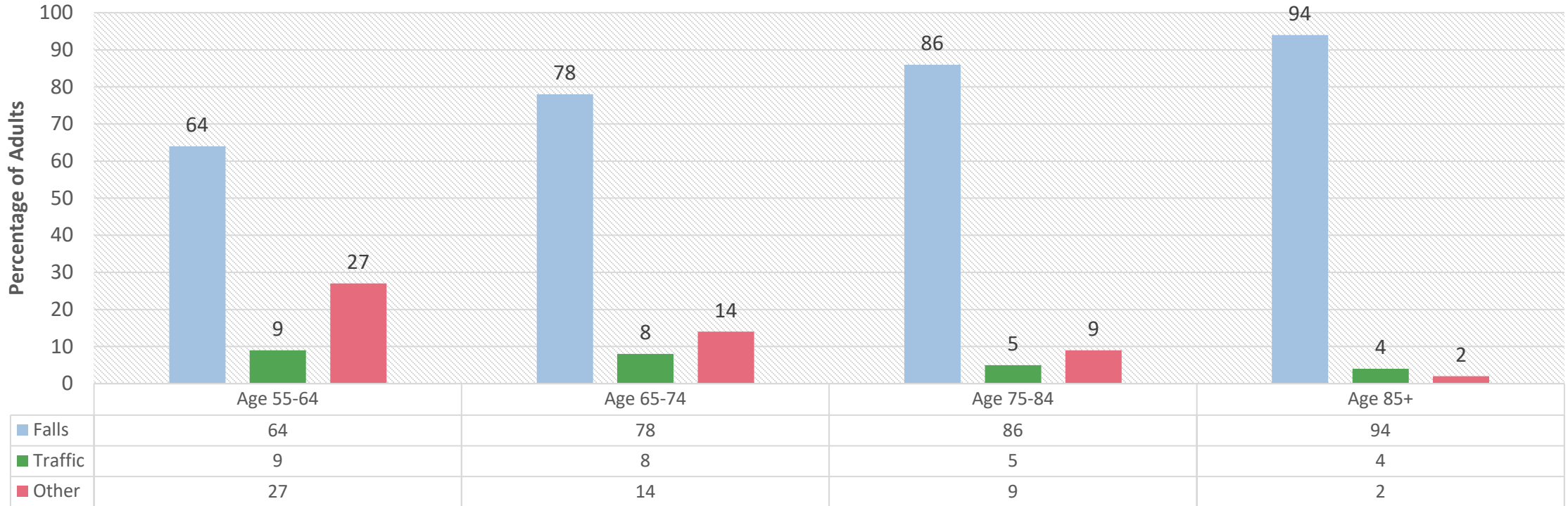
Why people fall



How to prevent falls

# Overview of falls among seniors

## Leading Cause of Non-Fatal Hospitalizations in Alaska 2016-2020



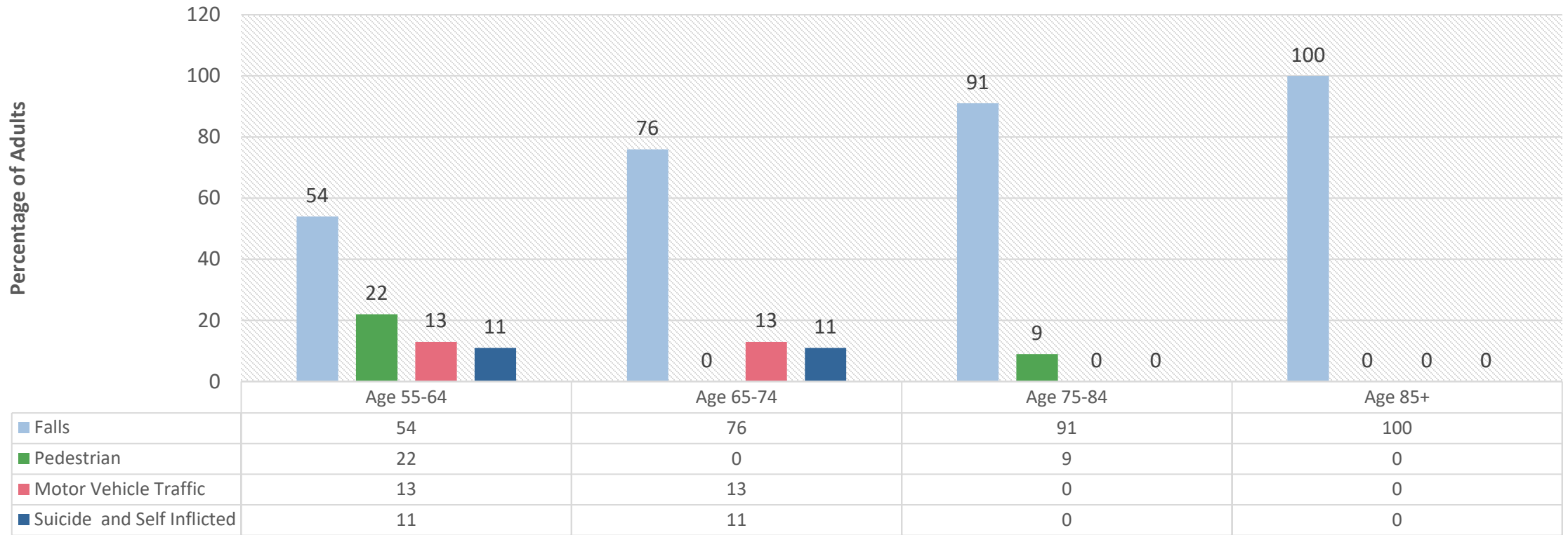
Other includes Assault, Pedestrian, ATV, Bicycle, Hypothermia/Frostbite, Accidentally struck by person or object, Fire/Flame

Source: Alaska Trauma Registry



# Overview of falls among seniors

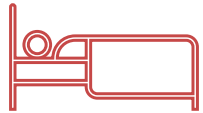
## Leading Cause of Fatal Injuries in Alaska 2016-2020



Source: Alaska Trauma Registry

# Where do people fall?

Over 20% of all falls that are serious and lead to hospitalizations occur in a person's home (Alaska Trauma Registry, 2021)



8% occur in the bedroom



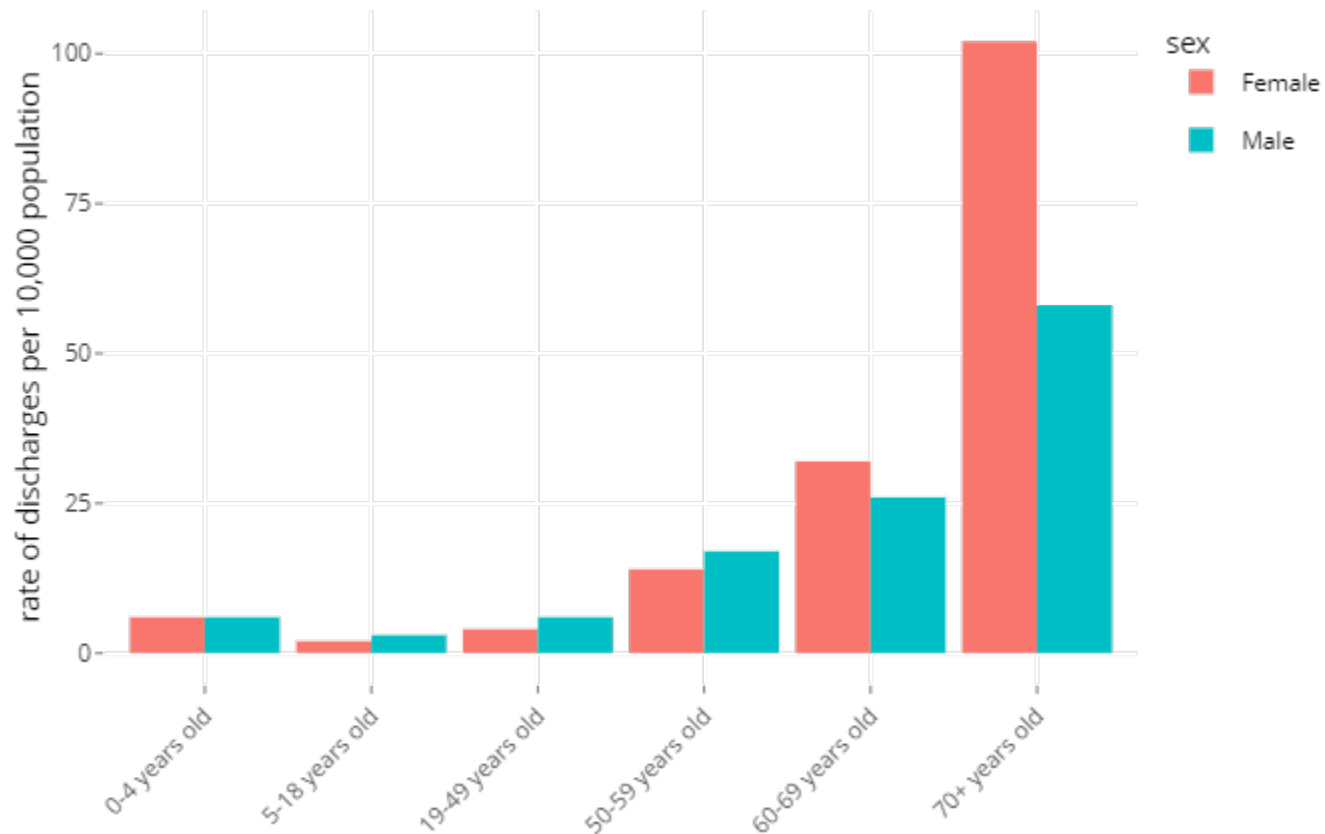
7% occur in the bathroom



5% occur in the kitchen

# Who experiences the most severe falls?

rate of discharges per 10,000 population by sex in the report year



- Older females experience more falls than any other age group
- ▣ This group is more likely to experience a hip fracture compared to males in their age group.

# Importance of Fall Prevention

## Why is fall prevention important?

- Falls are the leading cause of injury among older adults.
- Falls result in the loss of independence.
- Fall related injuries lead to significant healthcare costs.
- Many falls are preventable.
- Preventing falls helps maintain a higher quality of life in older adults.



# Consequences of Falls

Falls can lead to a wide range of consequences:

Physical injuries

Loss of independence

Increased mortality

Psychological effects

Medical costs

Chronic pain and disability

# Behavioral Factors



Reaching overhead



Wearing loose fitting or smooth-soled shoes



Diet lacking vitamins and minerals for healthy bone maintenance



lack of exercise



alcohol consumption.

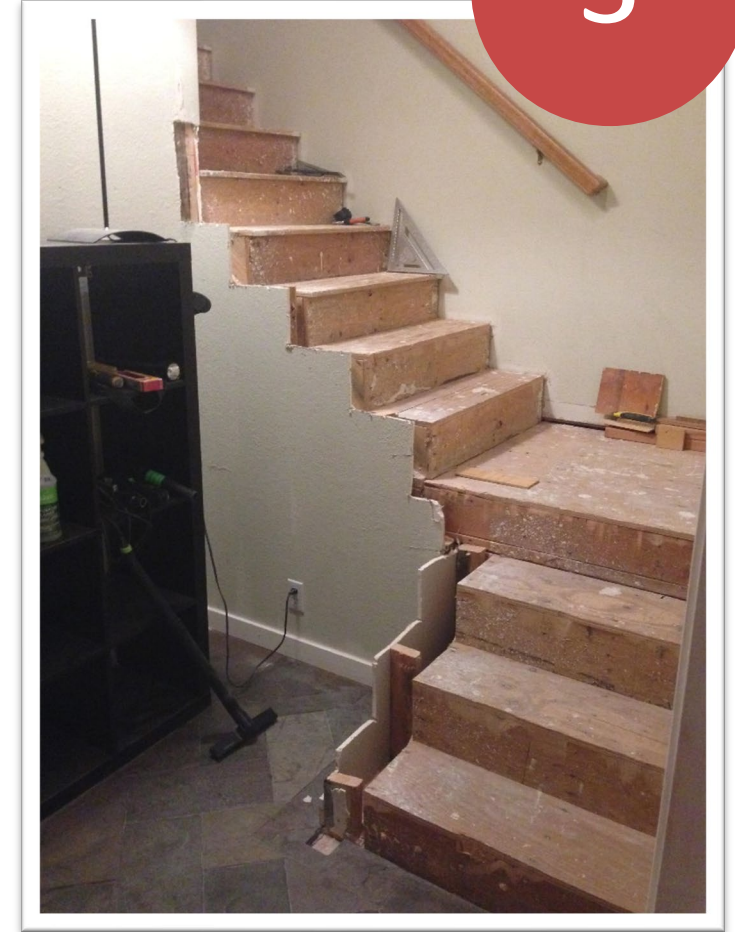
**Many  
contributing  
factors of falls  
include:**

- Slippery surfaces
- No handrails on stairs
- Cluttered floors
- Bad lighting
- Hard to reach items
- Loose rugs
- Electrical cords
- Unsecured stairways and uneven steps
- Lack of grab bars near the bathtub and shower
- Obstruction of furniture in walkways

# Environmental Modifications

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- Home Safety Modifications include:
  - Removing Hazards:
    - Clearing walkways of clutter, cords, and loose rugs.
    - Ensuring floors are free of obstacles that can cause tripping
  - Installing grab bars in bathrooms:
  - Placing non-slip mats in the bathroom and kitchen
  - Installing handrails on both sides of the stairs
  - Ensure stairway is in good repair
    - Install non-slip treads on steps.
    - Remove any loose carpet on steps
  - Improve lighting





# Exercise and Physical Activity

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## Benefits of Physical activity:

- Improves balance
- Strengthens muscles
- Increases flexibility
- Boosts endurance
- Enhances Coordination
- Reduces Fear of Falling
- Supports Bone Health
- Improves Mental Well-being
- Enhances Reaction Time
- Promotes Social Interaction

# Medication Review and Management

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Medication management plays a crucial role in fall prevention. This process involves the primary care provider evaluating and adjusting medications to minimize side effects that could contribute to falls.

1. Review Medications Regularly:
2. Identify and Manage High-Risk Medications:
3. Monitor for Side Effects:
4. Simplify Medication Regimens:
5. Educate Patients and Caregivers:



# Vision Care

Vision care is a crucial component of fall prevention, particularly for older adults, as poor vision significantly increases the risk of falls.

Here's what vision care for fall prevention typically consists of:

## 1. Regular Eye Exams

Annual Check-Ups:

Prescription Updates:

## 2. Corrective Lenses

Single-Lens Glasses:

Proper Fit

## 3. Adequate Lighting

Enhance Home Lighting:

Nightlights:



[This Photo](#)

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# Footwear Recommendation

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Footwear plays a significant role in fall prevention. The right footwear can provide stability, support, and comfort, reducing the risk of slipping, tripping, or losing balance.

Here are key footwear recommendations for fall prevention:

1. Non-slip soles
2. Proper fit
3. Secure fastenings
4. Low heels
5. Avoid slippers



# Fall Risk Assessment Tools

### Four Things You Can Do to Prevent Falls:

- 1 **Speak up.**  
Talk openly with your healthcare provider about fall risks and prevention. Ask your doctor or pharmacist to review your medicines.
- 2 **Keep moving.**  
Begin an exercise program to improve your leg strength and balance.
- 3 **Get an annual eye exam.**  
Replace eyeglasses as needed.
- 4 **Make your home safer.**  
Remove clutter and tripping hazards.

### Learn More

Contact your local community or senior center for information on exercise, fall prevention programs, and options for improving home safety, or visit:

- [cdc.gov/falls](https://cdc.gov/falls)
- [www.stopfalls.org](https://www.stopfalls.org)

## Stay Independent

Learn more about fall prevention.



1 in 4 people 65 and older falls each year.

For more information, visit [www.cdc.gov/steadi](https://www.cdc.gov/steadi)

This brochure was produced in collaboration with the following organizations: VA Greater Los Angeles Healthcare System, Geriatric Research Education & Clinical Center (GRECC), and the Fall Prevention Center of Excellence.



**Centers for Disease Control and Prevention**  
National Center for Injury Prevention and Control



2023

**Prevent falls to stay injury-free and independent.**

### Check Your Risk for Falling

Circle "Yes" or "No" for each statement below			Why it matters
Yes (2)	No (0)	I have fallen in the past year.	People who have fallen once are likely to fall again.
Yes (2)	No (0)	I use or have been advised to use a cane or walker to get around safely.	People who have been advised to use a cane or walker may already be more likely to fall.
Yes (1)	No (0)	Sometimes I feel unsteady when I am walking.	Unsteadiness or needing support while walking are signs of poor balance.
Yes (1)	No (0)	I steady myself by holding onto furniture when walking at home.	This is also a sign of poor balance.
Yes (1)	No (0)	I am worried about falling.	People who are worried about falling are more likely to fall.
Yes (1)	No (0)	I need to push with my hands to stand up from a chair.	This is a sign of weak leg muscles, a major reason for falling.
Yes (1)	No (0)	I have some trouble stepping up onto a curb.	This is also a sign of weak leg muscles.
Yes (1)	No (0)	I often have to rush to the toilet.	Rushing to the bathroom, especially at night, increases your chance of falling.
Yes (1)	No (0)	I have lost some feeling in my feet.	Numbness in your feet can cause stumbles and lead to falls.
Yes (1)	No (0)	I take medicine that sometimes makes me feel light-headed or more tired than usual.	Side effects from medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I take medicine to help me sleep or improve my mood.	These medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I often feel sad or depressed.	Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.

**Total** Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Discuss this brochure with your doctor.

**To check your risk online, visit: [www.bit.ly/3o4RiW8](https://www.bit.ly/3o4RiW8)** This checklist was developed by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates and is a validated fall risk self-assessment tool (Rubenstein et al. J Safety Res; 2011: 42(6)493-499). Adapted with permission of the authors.

# Home Safety Checklists



## Check for Safety

### A Home Fall Prevention Checklist for Older Adults

Contact your local community or senior center for information on exercise, fall prevention programs, or options for improving home safety.

For additional information on fall prevention, visit [go.usa.gov/xN9XA](http://go.usa.gov/xN9XA)



Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control



Stopping Elderly Accidents, Deaths & Injuries

2017

Use this checklist to find and fix hazards in your home.

- | STAIRS & STEPS (INDOORS & OUTDOORS)  | FLOORS   | BEDROOMS   |
|--|--|--|
| <p>Are there papers, shoes, books, or other objects on the stairs?</p> <p><input type="checkbox"/> Always keep objects off the stairs.</p> <p>Are some steps broken or uneven?</p> <p><input type="checkbox"/> Fix loose or uneven steps.</p> <p>Is there a light and light switch at the top and bottom of the stairs?</p> <p><input type="checkbox"/> Have an electrician put in an overhead light and light switch at the top and bottom of the stairs. You can get light switches that glow.</p> <p>Has a stairway light bulb burned out?</p> <p><input type="checkbox"/> Have a friend or family member change the light bulb.</p> <p>Is the carpet on the steps loose or torn?</p> <p><input type="checkbox"/> Make sure the carpet is firmly attached to every step, or remove the carpet and attach non-slip rubber treads to the stairs.</p> <p>Are the handrails loose or broken? Is there a handrail on only one side of the stairs?</p> <p><input type="checkbox"/> Fix loose handrails, or put in new ones. Make sure handrails are on both sides of the stairs, and are as long as the stairs.</p> | <p>When you walk through a room, do you have to walk around furniture?</p> <p><input type="checkbox"/> Ask someone to move the furniture so your path is clear.</p> <p>Do you have throw rugs on the floor?</p> <p><input type="checkbox"/> Remove the rugs, or use double-sided tape or a non-slip backing so the rugs won't slip.</p> <p>Are there papers, shoes, books, or other objects on the floor?</p> <p><input type="checkbox"/> Pick up things that are on the floor. Always keep objects off the floor.</p> <p>Do you have to walk over or around wires or cords (like lamp, telephone, or extension cords)?</p> <p><input type="checkbox"/> Coil or tape cords and wires next to the wall so you can't trip over them. If needed, have an electrician put in another outlet.</p> | <p>Is the light near the bed hard to reach?</p> <p><input type="checkbox"/> Place a lamp close to the bed where it's easy to reach.</p> <p>Is the path from your bed to the bathroom dark?</p> <p><input type="checkbox"/> Put in a nightlight so you can see where you're walking. Some nightlights go on by themselves after dark.</p>                           |
|  | KITCHEN  | BATHROOMS  |
|  | <p>Are the things you use often on high shelves?</p> <p><input type="checkbox"/> Keep things you use often on the lower shelves (about waist high).</p> <p>Is your step stool sturdy?</p> <p><input type="checkbox"/> If you must use a step stool, get one with a bar to hold on to. Never use a chair as a step stool.</p>   | <p>Is the tub or shower floor slippery?</p> <p><input type="checkbox"/> Put a non-slip rubber mat or self-stick strips on the floor of the tub or shower.</p> <p>Do you need some support when you get in and out of the tub, or up from the toilet?</p> <p><input type="checkbox"/> Have grab bars put in next to and inside the tub, and next to the toilet.</p> |



# Physical Therapy and Rehabilitation

Benefits of physical therapy include:

## 1. Improved Strength and Balance

- Targeted Exercises: Physical therapists design exercises to strengthen muscles, particularly in the legs and core, which are essential for maintaining balance.
- Balance Training: Rehabilitation includes specific exercises to enhance balance and coordination, reducing the likelihood of falls.

## 2. Increased Mobility and Flexibility

- Range of Motion: Therapy helps improve joint flexibility and range of motion, making it easier to perform daily activities without risking a fall.
- Mobility Aids: Therapists can recommend and train individuals on the proper use of mobility aids like canes or walkers, improving safety.

# Community Based Fall Prevention Program

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Community-based fall prevention programs are designed to reduce the risk of falls through education, physical activity, and social support.

Key benefits Include:

- Reduced fall risk
- Improved physical health
- Increased independence
- Social Support
- Cost savings





1

Fall data – falls are leading cause of .....

2

Why people fall - shoes, diet, no exercise, cluttered living spaces

3

How to prevent falls – current planned project, fall prevention kits

# Falls Can Be Prevented!

## Learn more and find resources

Learn more about reducing your chances of falling at the [National Institute of Aging falls and falls prevention page](https://www.nia.nih.gov/health/falls-and-falls-prevention). <https://www.nia.nih.gov/health/falls-and-falls-prevention>

Take the [Falls Free Check Up](https://www.ncoa.org/tools/falls-free-checkup) from the National Council on Aging. <https://www.ncoa.org/tools/falls-free-checkup>.

# CHRONIC DISEASE PREVENTION & HEALTH PROMOTION

## Fall Prevention

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