

BETTER BRAINS BETTER BODIES BETTER AGEING



An initiative by the Eastern Suburbs Older Persons Mental Health Service,
Prince of Wales Hospital



Don't let falls trip you up:

Exercise tips for falls prevention and healthy ageing

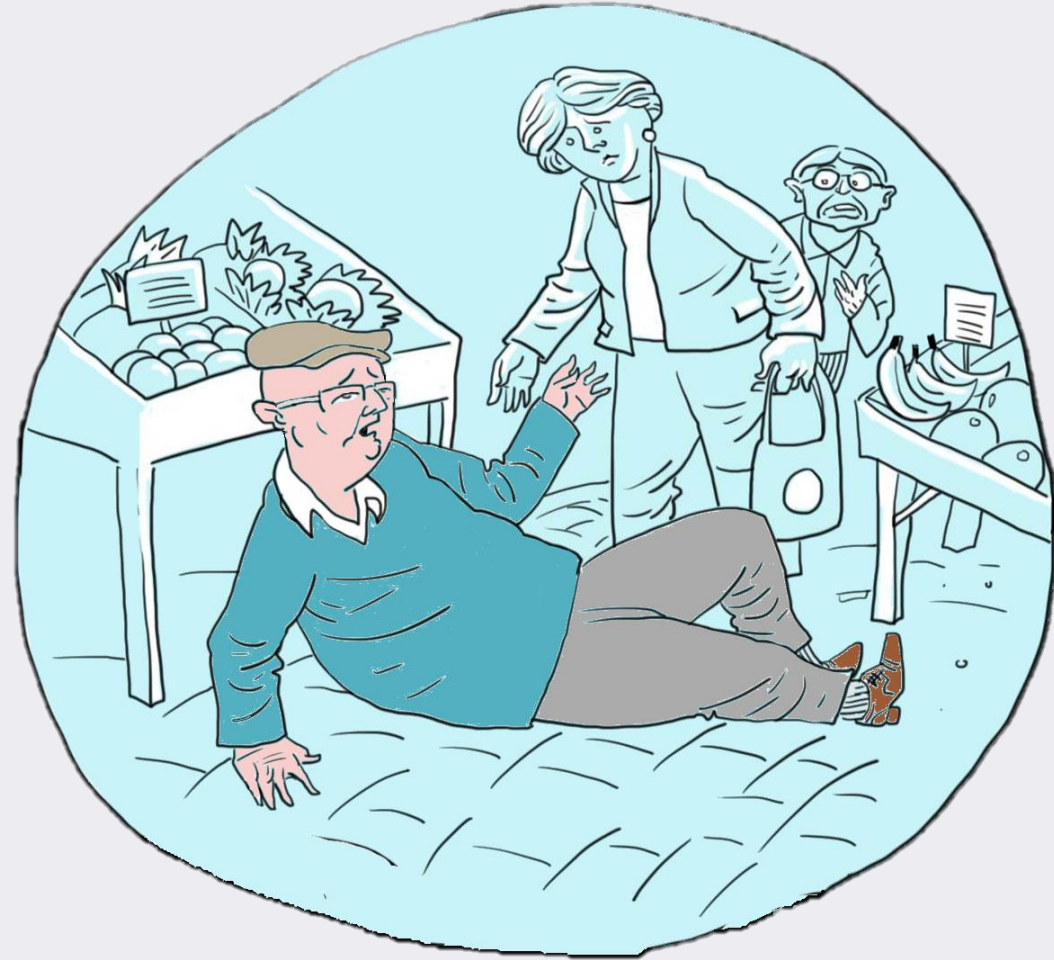
Professor Kim Delbaere



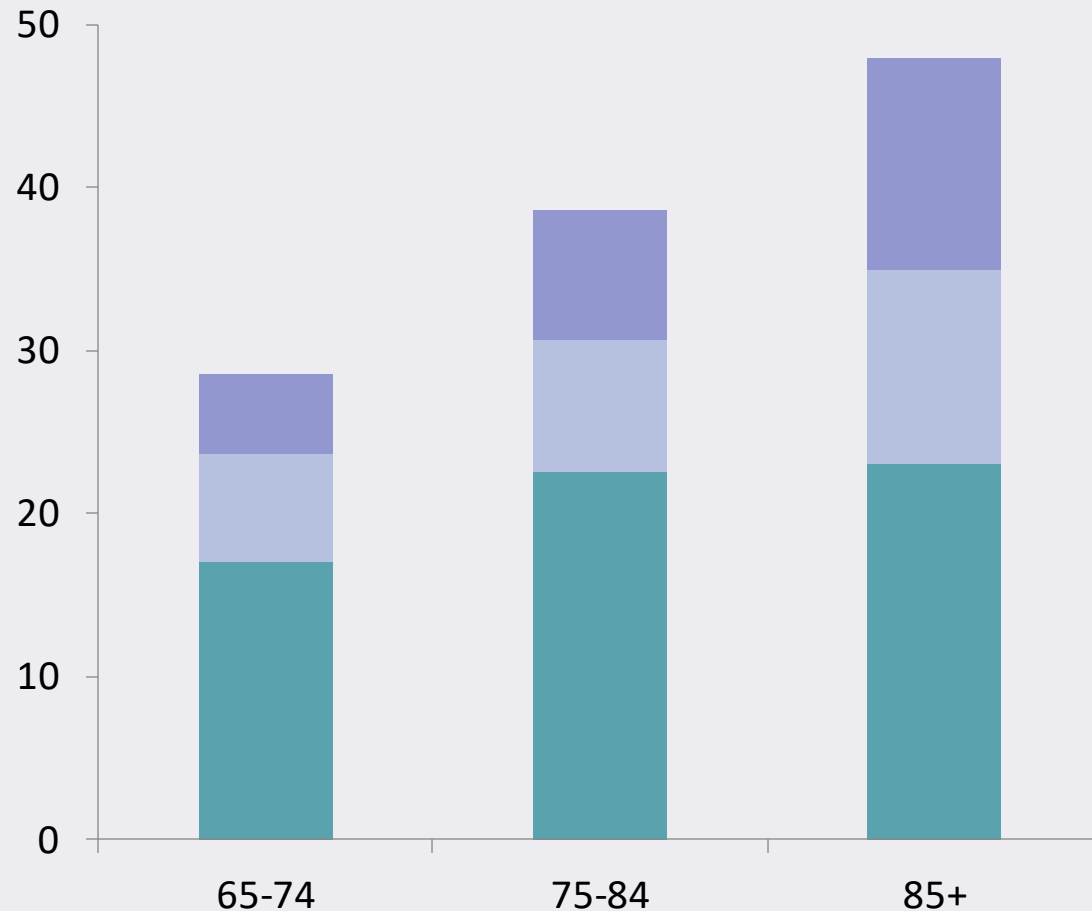
Falls in older adults

A fall is

“an event which results in a person coming to rest inadvertently on the ground or floor or other lower level”



What percentage of people over 65 fall each year?



Falls are **very common**...

- 65+: one in three
- 85+: one in two
- 50% fall 2+ times
- 25% suffer substantial injuries

Falls can result in reduced quality of life due to loss of confidence and restriction of activity

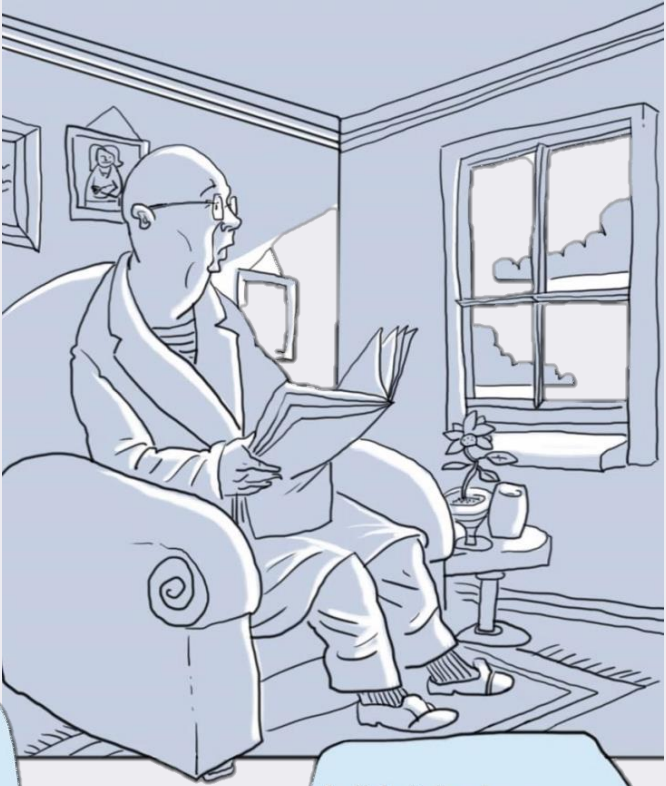


I had a fall at the markets in front of so many people.

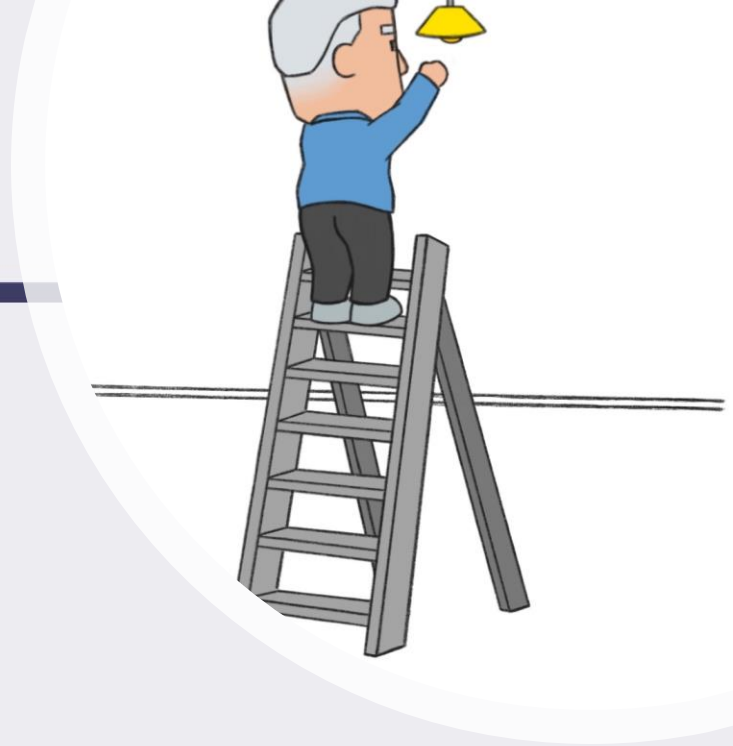
It was embarrassing...



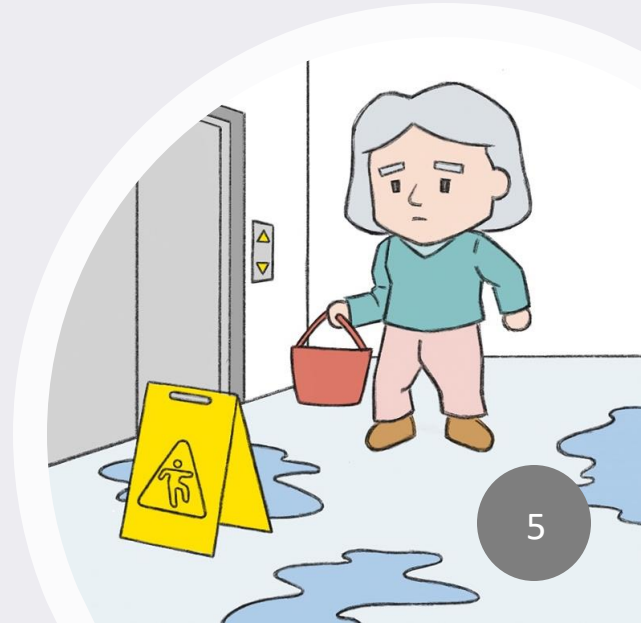
So I just didn't go to the market anymore..



I didn't feel confident anymore in crowded places. I hardly got out of the house and I started to feel lonely.

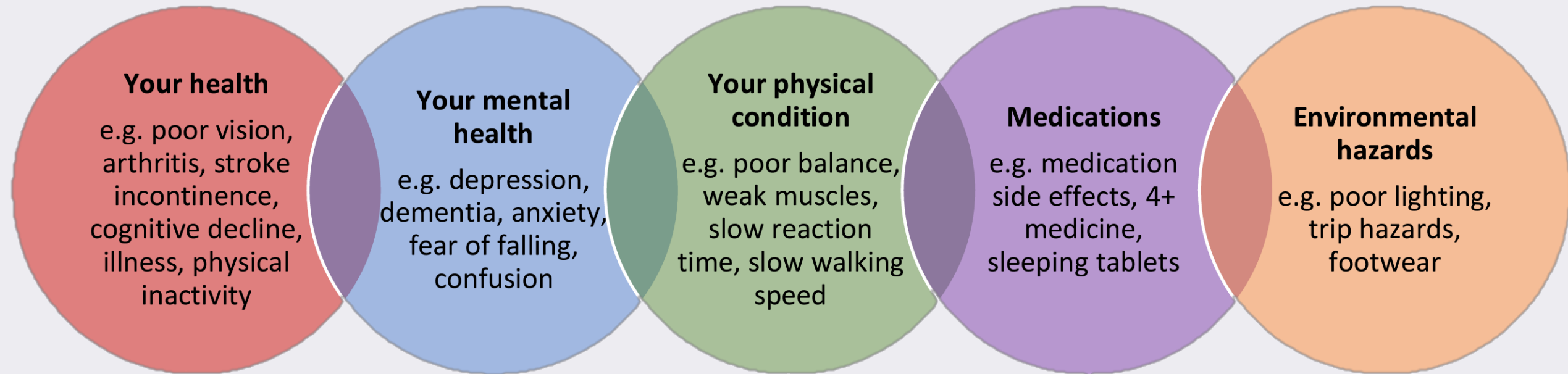


Why do people fall?

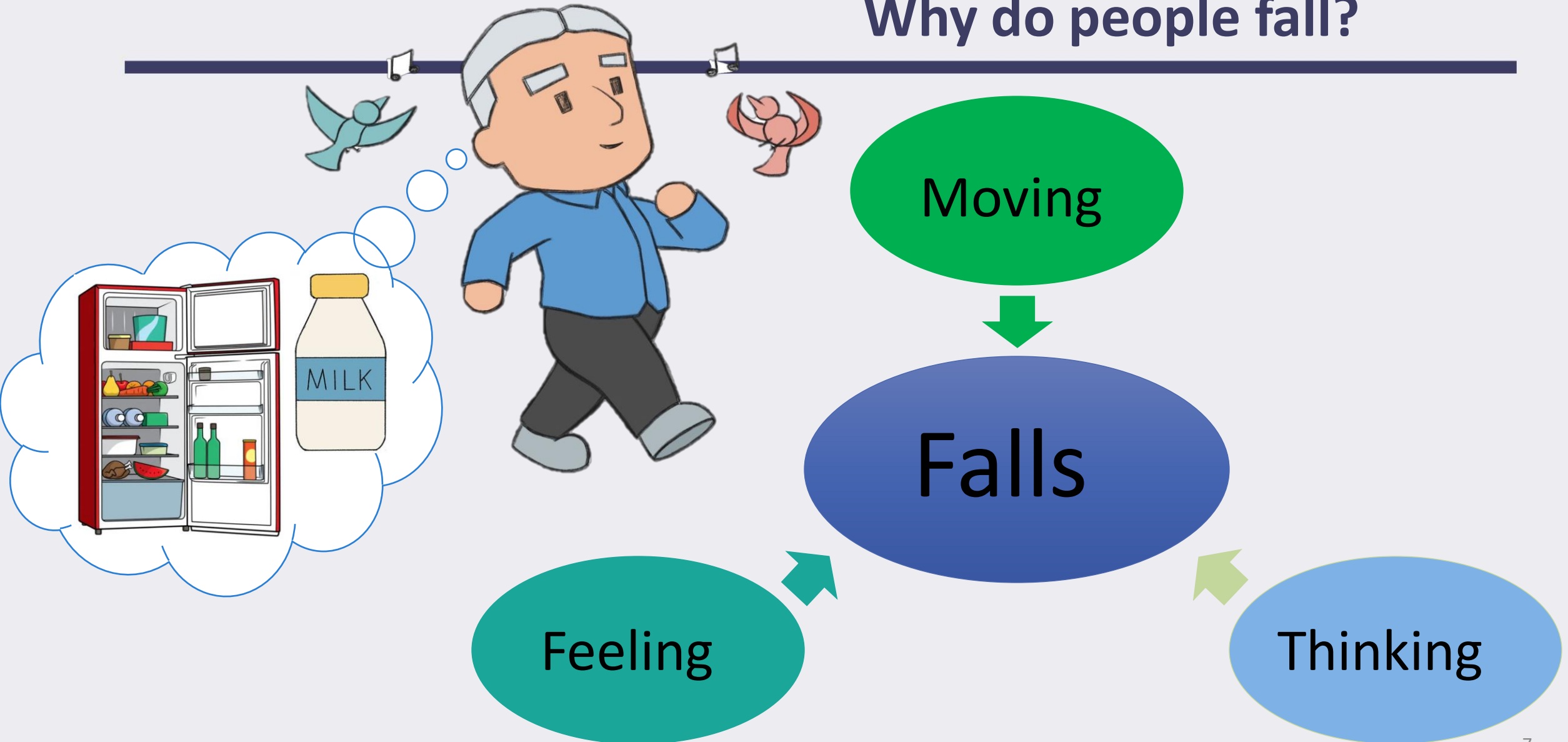


Why do people fall?

Falls often **result from complex interactions** between different risk factors



Why do people fall?



Be active

at least
150
minutes
moderate intensity
per week
increased breathing
able to talk



OR
or a combination of both

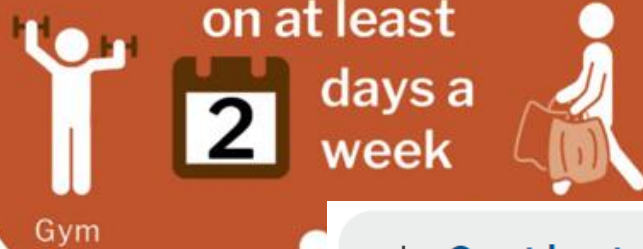
at least
75
minutes
vigorous intensity
per week
breathing fast
difficulty talking



to keep muscles, bones and joints strong

Build strength

on at least
2
days a
week



Minimise sedentary time

Break up periods of inactivity



On at least



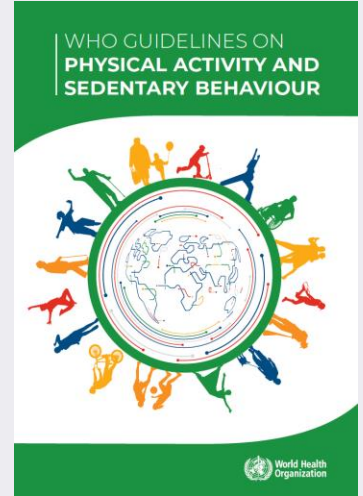
3

days
a week

varied
multicomponent
physical activity that
emphasizes functional
balance and strength
training at moderate
or greater intensity.



Physical Activity Guidelines



As part of their weekly physical activity, older adults should do varied multicomponent physical activity that emphasizes functional balance and strength training at moderate or greater intensity, on 3 or more days a week, to enhance functional capacity and to prevent falls.

Strong recommendation, moderate certainty evidence

Exercise can reduce falls and improve mobility



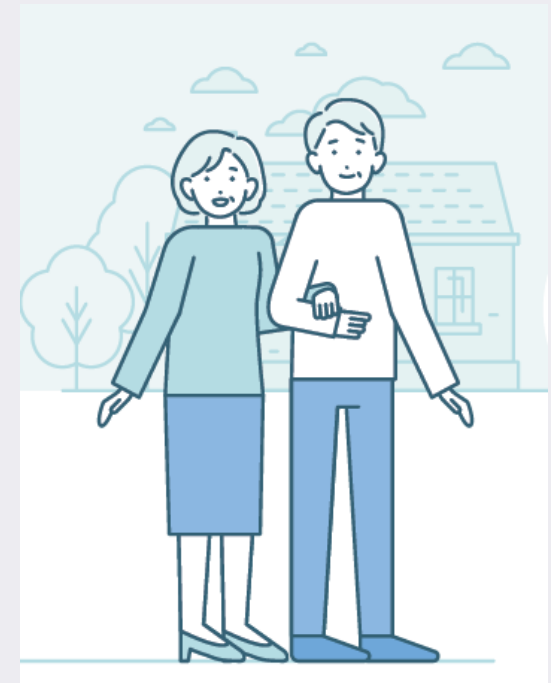
- **Exercise interventions** are the single most effective strategies to reduce the rate of falls (Gillespie et al., 2012)

- Moderately to highly challenging **balance exercises** and performed for at least **two hours a week** over a 6-month period

(Sherrington et al., 2008, 2015)

- **Falls reductions of 37% to 42%**

(Sherrington et al., 2008-2019)



Otago Exercise Programme



StandingTall

Standing Tall NeuRA
 Discover. Challenge. Grow.

Menu

- Exercise
- Progress
- Goals & Journal
- Calendar
- Help

0% 1 hour of exercises left this week

Back to Home

Exercises

Let's do this.
 How long would you like to exercise for?

Note that you still need to do 1 hour this week.

0%

Choose your exercise duration
 Note: the time you select is the time spent exercising. The overall session will run longer if you watch the demonstration videos.

- 10 Minutes
- 15 Minutes
- 20 Minutes
- 25 Minutes
- 30 Minutes

Pause Exercise

Stepping in the Grid - Mixed

Set: 1 / 3
 Duration: 21 seconds 15%

K	L	M	N
O	P	Q	R
S	T	U	V
W	X	Y	Z

0% 1 hour of exercises left this week

Pause Exercise

Standing with Eyes Closed - Near Tandem

Set: 2 / 3
 Duration: 30 seconds 77%

0% 1 hour of exercises left this week

Pause Exercise

Lean Side-to-Side on Foam

Set: 1 / 3
 Duration: 58 seconds 11%

0% 1 hour of exercises left this week

Pause Exercise

Step and Bend - Mixed

Set: 1 / 3
 Duration: 24 seconds 63%

0% 1 hour of exercises left this week

Pause Exercise

Step Up Sideways - High Knees

Set: 2 / 3
 Duration: 11 seconds 18%

0% 1 hour of exercises left this week

Pause Exercise

Standing with Eyes Closed - Near Tandem

Set: 3 / 3
 Duration: 30 seconds 0%

Exercise Complete

Well done, the exercise is complete!
 Please rate how you went. You found this exercise:

☹️ 😊

1 2 3 4 5
 Unstable Somewhat Stable Mostly Stable Stable Very Stable

Selecting 4 suggests you "felt stable" and the exercise was fairly easy to complete **without** holding on for support.

Did you need to use a chair to complete the exercise?

✓ No ✗ Yes

Complete exercise ✓

Interventions targeted to people with particular risk factors

1. Podiatry intervention for people with disabling foot pain
2. Vision:
 1. cataract removal in those with operable cataracts
 2. replacement of multi-focal glasses with single-lens glasses in those who walk outdoors
3. Medication review:
 1. gradual reduction in psychoactive medications
 2. vitamin D in those with low vitamin D
 3. medication review by a General Practitioner
4. Occupational therapy:
 1. hip protectors to prevent hip fractures if worn at the time of falls
 2. environmental falls prevention interventions in high-risk people

Did you know?

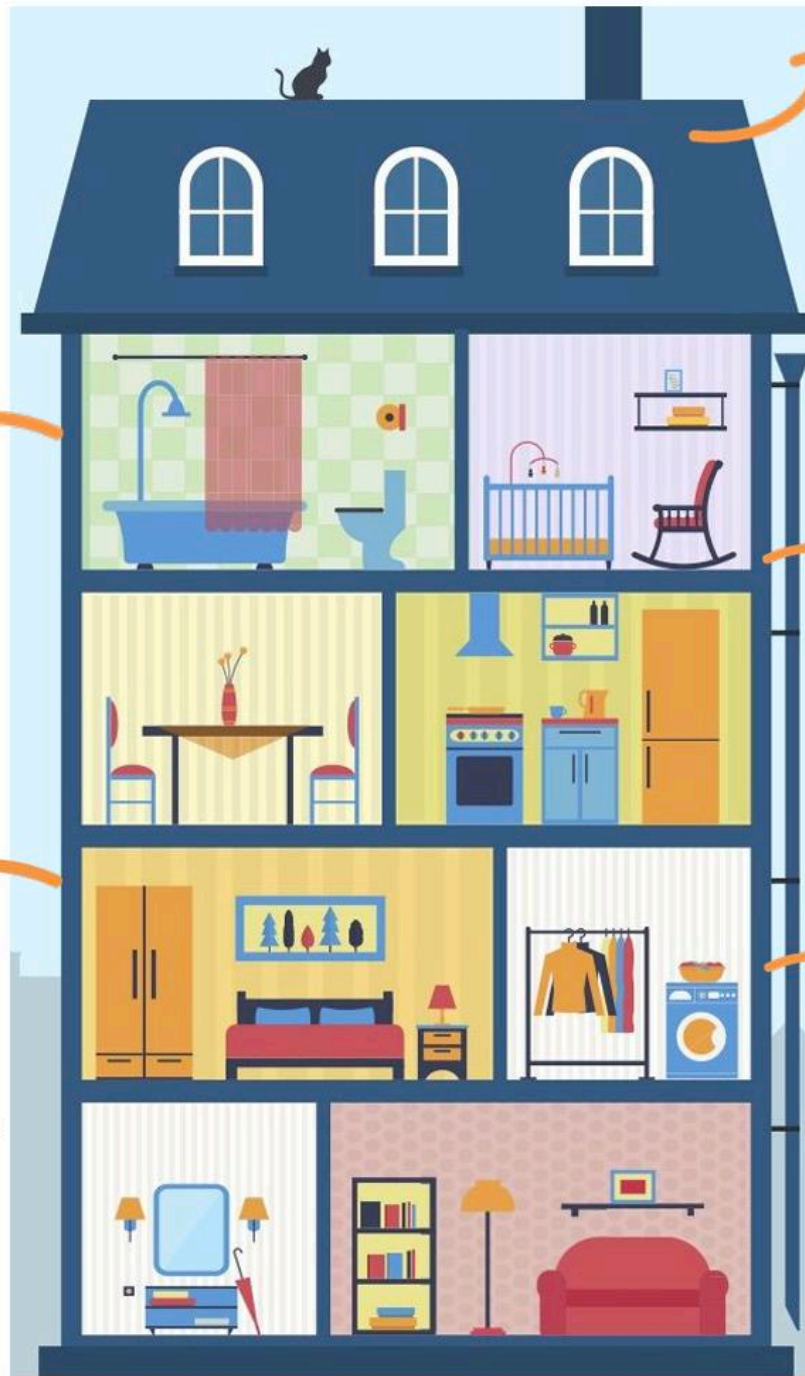
About 50% of all falls occur in and around the home.

Bathroom

- Install grab rails
- Use non slip mats
- Consider a shower chair

Bedroom

- Ensure lamps are easy to reach
- Plug in night lights
- Have a phone close to floor in case of an emergency



Floors and environment

- Remove cords and wires from walkways
- Use non-skid rugs
- Secure carpet edges, secure or remove mats and rugs
- Remove clutter and keep paths free from obstacles

Kitchen

- Keep often used items in easy to reach places
- Never use a chair to climb
- Clean up spills straight away

Stairs

- Install full-length hand rails
- Ensure adequate lighting
- Mark edges of steps clearly
- Attach non-slip treads to step/stair edges

Some practical tips to discuss with your doctor

Medical

Maintain regular visits to your GP for treatment of any conditions that can lead to falls (diabetes, MS, stroke, musculoskeletal).

What questions could you ask your GP?

- Are my medications affecting my dizziness/falls risk?
- Are there any falls prevention programs (balance + exercise) in the area?
- Is there someone I could see to help me with exercise or my balance?

Eyesight

- Wear single lens glasses, no bifocals or multifocal when walking outside.
- Have cataracts removed if recommended by eye specialist.
- Have eyes checked every 12 months.
- Wear a hat/sunglasses when out in the sun to reduce glare.
- Make sure your home is well lit.



There are many co-benefits of falls prevention strategies



Reduced risk of dementia



Enhanced heart health



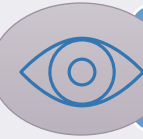
Mental health benefits



Medication reviews



Alleviating foot problems



Improved eyesight



Increased confidence at home

“ I’m not scared now to do anything that would involve my balance because I feel more secure in what I’m doing there.

- FALLS PREVENTION PROGRAM PARTICIPANT, MALE, 76 YEARS



There are many co-benefits of physical activity

-  Benefits health
-  Improves sleep
-  Maintains healthy weight
-  Manages stress
-  Improves quality of life

Reduces your chance of

- Type II Diabetes -40%
- Cardiovascular disease -35%
- Falls, depression etc. -30%
- Joint and back pain -25%
- Cancers (colon and breast) -20%

Some is good,
more is better

Make a start today:
it's never too late

Every minute
counts

Thank you!

<https://standingtall.org.au/>

