

Falls prevention for the aged living at home – an occupational therapist's perspective

Mary CHU

Department Manager (Occupational Therapy)

Queen Mary Hospital

Life Expectancy for Countries, 2014

Rank	Country	Life expectancy (yrs.)
1	Monaco	89.57
2	Macau	84.48
3	Japan	84.46
4	Singapore	84.38
5	San Marino	83.18
6	Hong Kong	82.78
7	Andorra	82.65
8	Switzerland	82.39
9	Guernsey	82.39
10	Australia	82.07

Prevalence of falls in the elderly

- **Approximately 28-35% of people aged of 65 and over fall each year.**



(WHO, 2007)

- **Prevalence of community elderly falls in Hong Kong was 19% and the mean number of falls per faller was 1.4.**

(Chu et al, 2007)

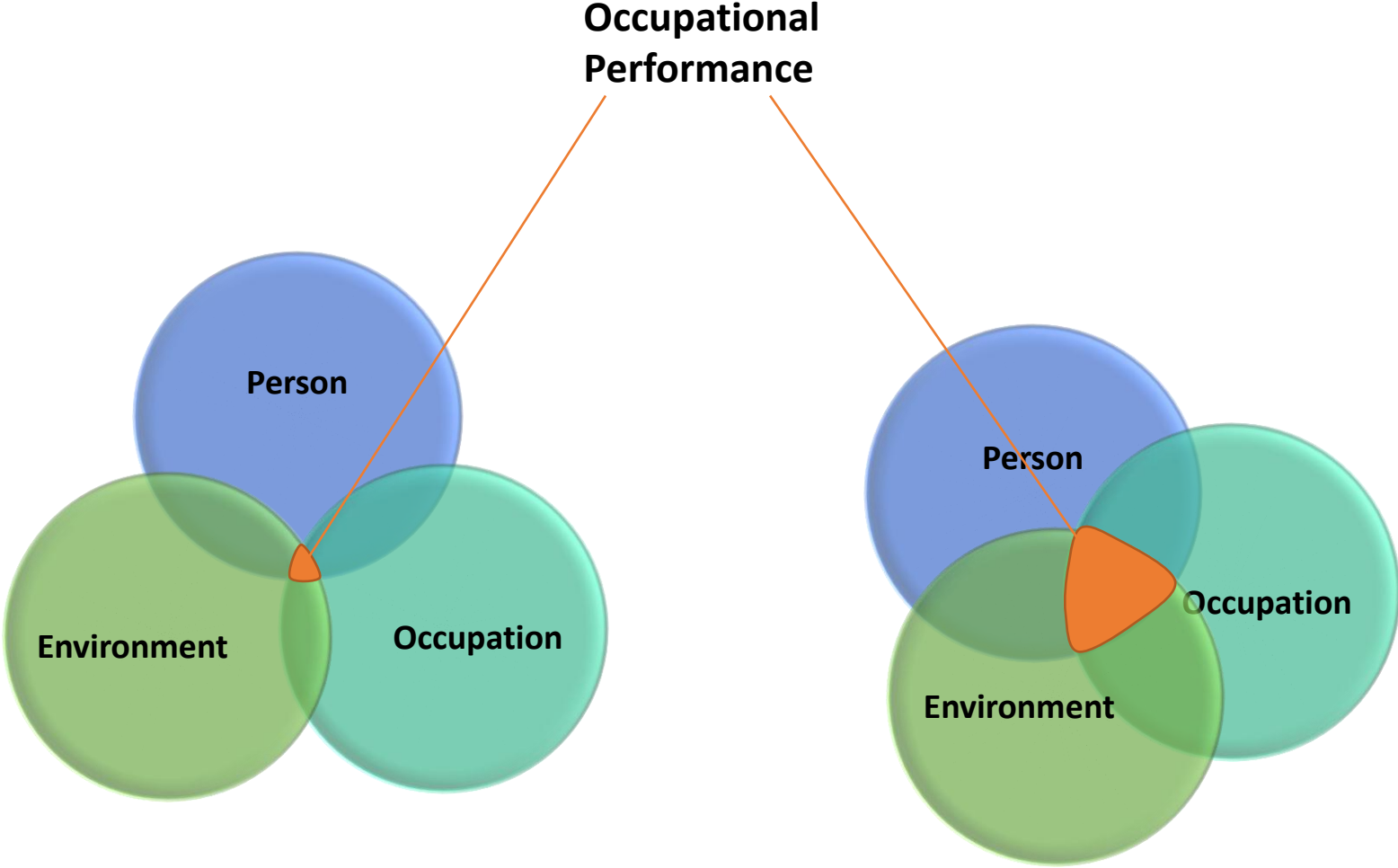
- **9.9% of falls resulted in bone fractures and 31.3% resulted in soft tissue injuries**

(Chu et al, 1999)

Risk Factor Model for Falls in Older Age



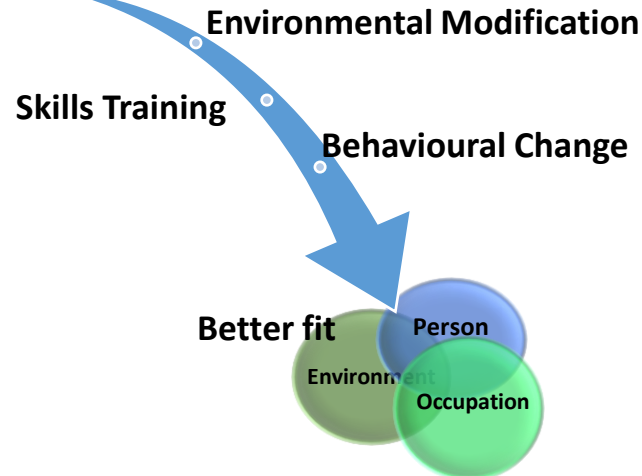
Occupational Therapy Model of Practice Person Environment Occupation (PEO) Model Law et al, 1996



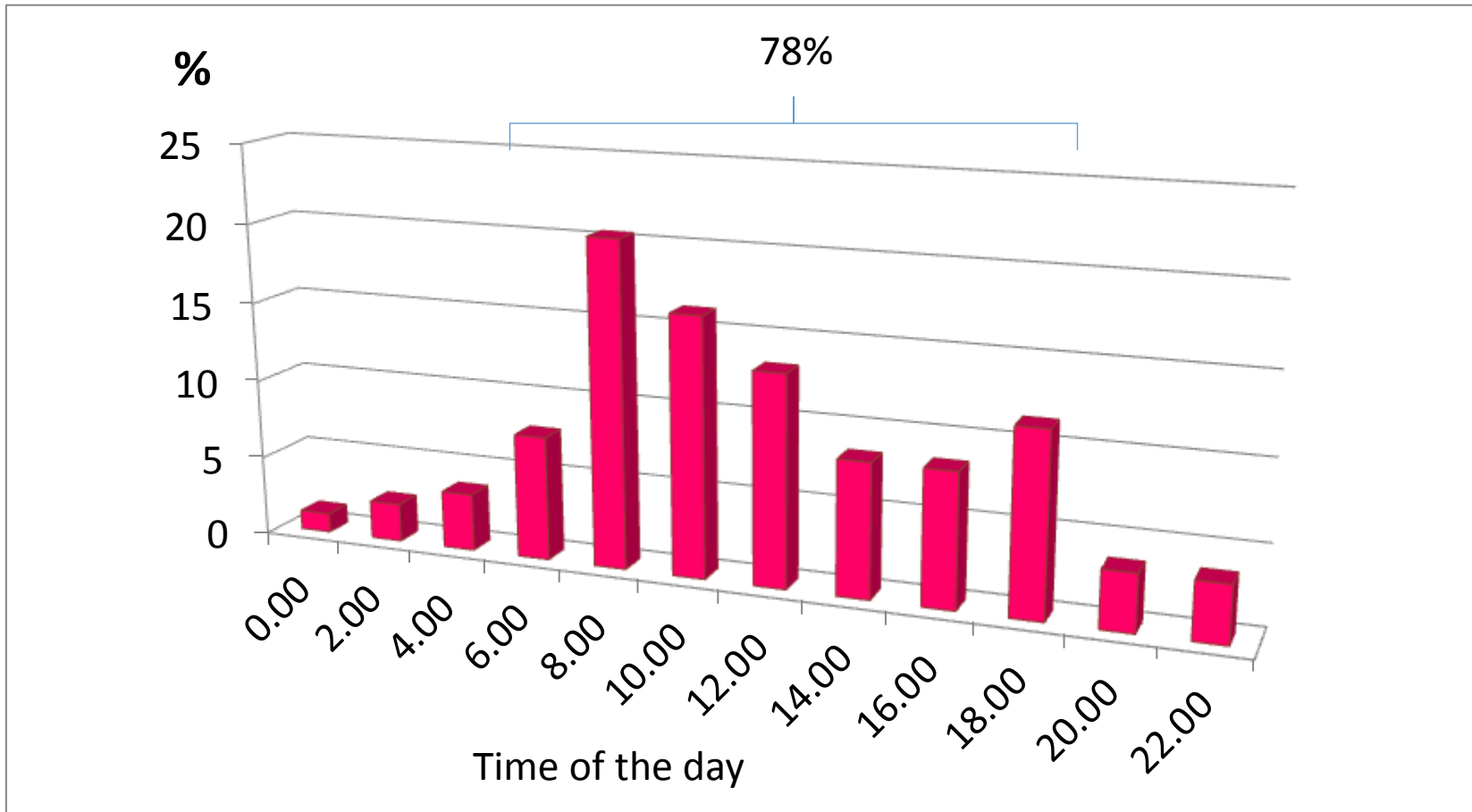
Home Visit by an Occupational Therapist (OT)

1. Assessment of the person's functional abilities
2. Daily Life Routine
3. Home Safety Assessment
4. Occupational Performance
5. Fall risk behaviour identification

OT Intervention

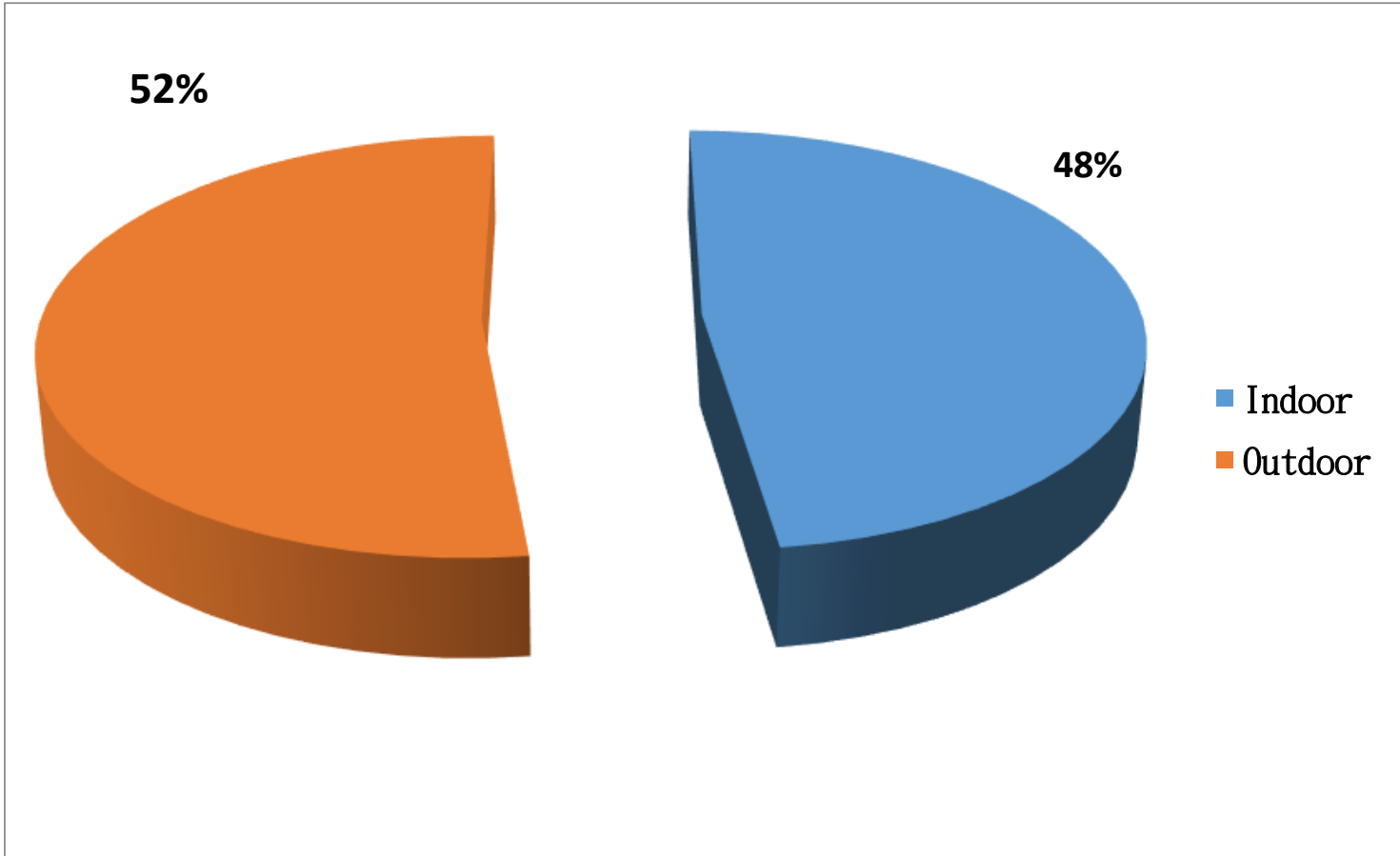


Elderly Fall



Source: Findings from a recent RCT study on using OT home visit to reduce falls in community elderly in Hong Kong.

Location of Fall



Top Five Environmental Fall Risks at home

1. Inadequate lightning
2. Obstacles in the passage way
3. Loose carpets or rugs
4. Slippery floor
5. Bathroom hazards

Home Environmental Challenges for the Aged

- Lighting
- Obstacles in the passageway
- Loose rugs/cloth/electric cord
- Difference in floor level
- Threshold (height and width)
- Inadequate Colour Contrast
- Toilet Door
- Layout – difficult to access

Home Environmental Challenges for the Aged

- Lighting



No lighting
inside toilet

Home Environmental Challenges for the Aged

- Difference in floor level:



Inside
threshold
height
difference
= 0.9 cm



Outside
threshold
height
difference
= 5.8 cm.

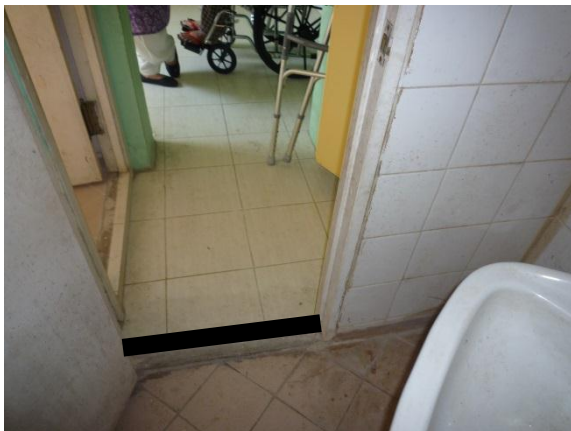
Home Environmental Challenges for the Aged

- Threshold (height and width)



Home Environmental Challenges for the Aged

- Inadequate Colour Contrast



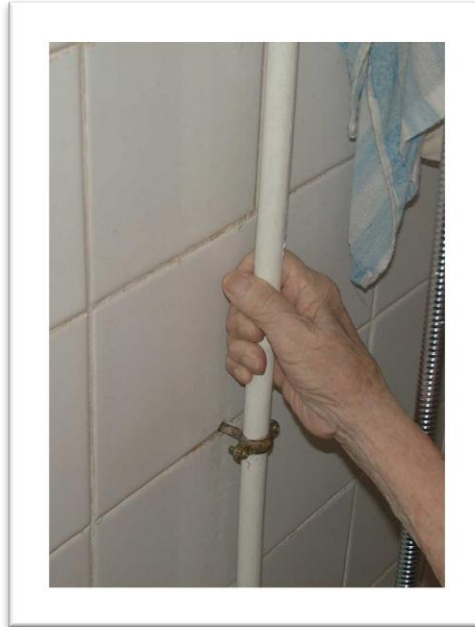
Improve Colour contrast

Home Environmental Challenges for the Aged

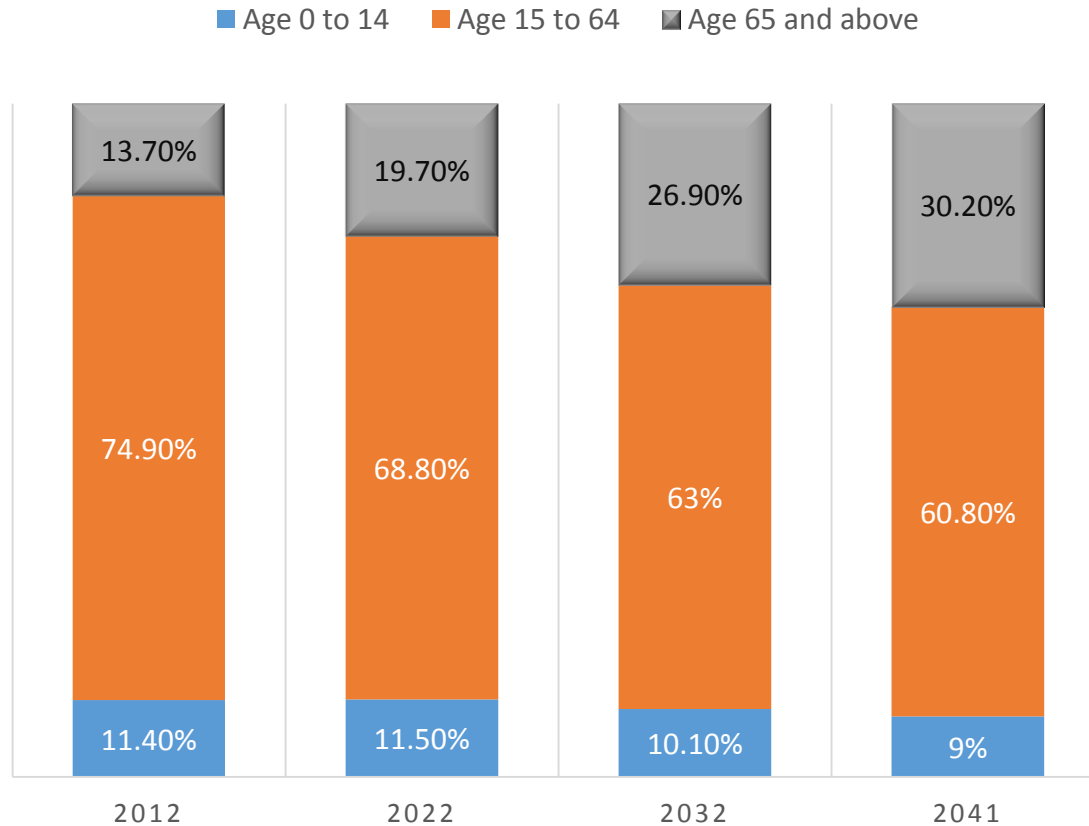
- Layout – difficult to access



Risky behaviour

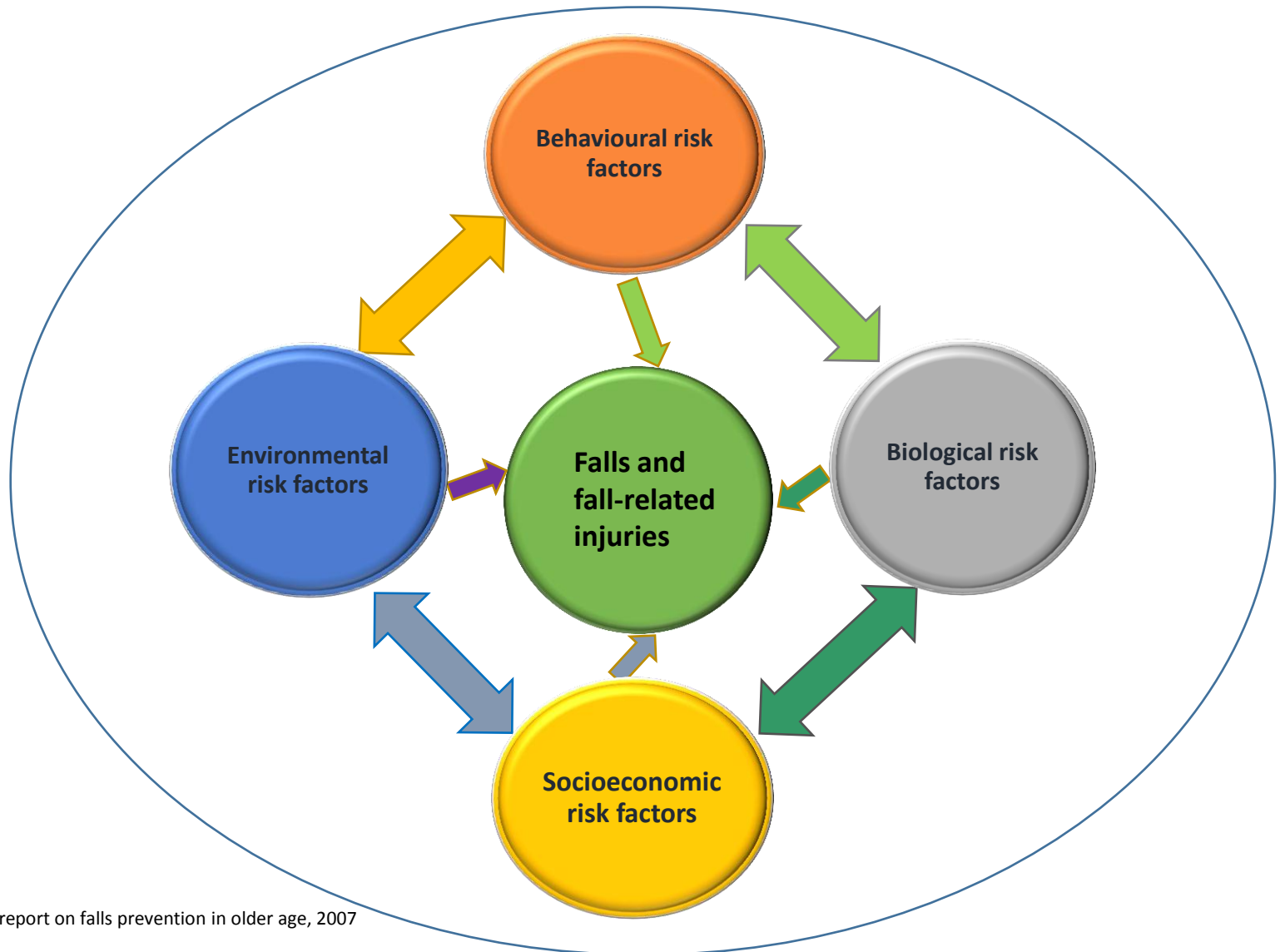


Population by Age Group



Source: 2013-14 Budget Speech

Risk Factor Model for Falls in Older Age

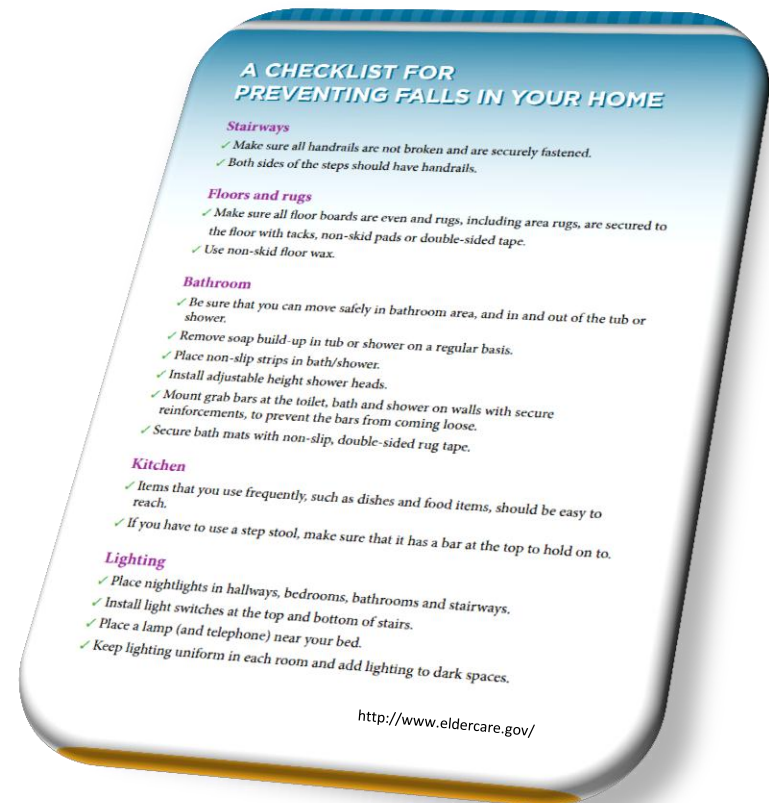
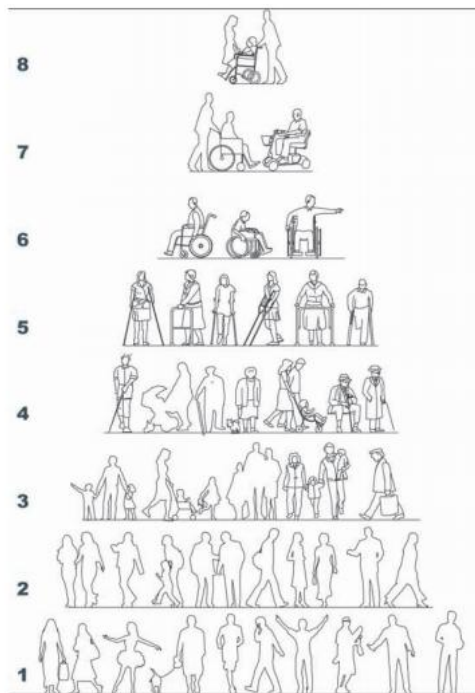


Reducing Environmental risk factors

- Housing design - Flexible to accommodate changing care needs

Accommodation and Prevention

Universal Design



Thank You