

# Hip Protectors – Physiotherapy

## Evidence Informed Practice

3 major strategies to prevent hip fractures:

- (1) Prevent falls
- (2) Enhance bone density
- (3) Protect the hip from impact

Effectiveness of hip protectors (HPs), in order of setting from greatest to least:  
residential care > acute care > community.

***Hip fractures are rare for any older person who was correctly wearing a hip protector (HP) with proven ability to withstand the impact from a fall. It is recommended that older adults who are at risk for a hip fracture (most residents in residential care and older adults with prior low impact fractures or a diagnosis of osteopenia or osteoporosis in any setting) be encouraged to consider the use of validated brands of hip protectors.***

Hip protector use should also be combined with individually tailored & proven fall prevention strategies such as:

- Exercise prescription (particularly balance exercises)
- Appropriate footwear (supportive and ideal grip for walking surface)
- Adequate lighting
- Modifications to environment (e.g. grab bars, bed height, removing clutter)
- Mobility aids
- Eyewear and hearing aids if required
- Medical management (bisphosphonates, Vitamin D, calcium supplements)

Soft vs hard shell: both can be effective if worn properly but soft shells are often preferred by users

There are many models available; their effectiveness is variable and dependent on multiple factors.

Consult Figure1, page 4 from "Hip protectors: What does the literature tell us? (Dunne & Hoens, 2010) for a comparison between models.

## Who may benefit from HPs

Falls history/risk  
Osteoporosis  
Impaired cognition  
Incontinence

Berg less than 45  
TUG more than 35 seconds  
Schmidt Falls Risk more than 3  
Physiological profile assessment mild, or higher falls risk

## How to prescribe HPs

Aim to wear 24 hours/day

Follow fitting instructions  
ensure proper shell placement  
check placement often

2 to 3 pairs/person, or  
3 to 5 if incontinent

Follow laundering instructions  
Replace annually

## How to enhance compliance

For the patient/family:  
Education on benefits  
Address issues of appearance and comfort

For the care staff:  
education re the consequences and prevention of hip fracture  
Designate a 'champion'  
Collect and share data  
Recognition program

Developed by

PHC PT Research Education and Practice Coordinator

<b>Effective Date:</b>	SEP-2010
<b>Last Revised:</b>	
<b>Approved By:</b>	Professional Practice Leader Physiotherapy
	PHC
<b>Owners:</b>	Physiotherapy
	Professional Practice Leader Physiotherapy

This material has been prepared solely for use at Providence Health Care (PHC), Provincial Health Services Authority (PHSA) and Vancouver Coastal Health (VCH). PHC, PHSA and VCH accept no responsibility for use of this material by any person or organization not associated with PHC, PHSA and VCH. A printed copy of this document may not reflect the current electronic version.