

# Medication and falls: Key information for care home staff

In patients taking medicines known to contribute to falls, medication review can play an important part in falls prevention. The aim of the review should be to modify or withdraw the drug, if this is not possible close monitoring is required.

## Key points

- Residents who have fallen are at high risk for a repeat fall. The mortality risk from a fall at age 85 is about 1% per fall.<sup>1</sup>
- Older people ( $\geq 65$  years of age) may be more “sensitive” to medications.
- Residents taking  $\geq 4$  prescription drugs, regardless of type of drug, are at an increased risk for falls.<sup>2</sup>
- Falls may be due to recent medication changes, but are usually caused by medicines that have been given for a long time without appropriate review
- Orthostatic hypotension (sudden drop in blood pressure when they move from a lying down or sitting position to sitting or standing) is often caused by medication and leads to falls in older adults.<sup>3</sup>
- Residents at high risk of falling (e.g. with recurrent, unexplained or injurious falls) should be considered for specialist referral and multidisciplinary intervention.

In theory any medicine that causes one of the following effects can increase the risk of falling



**Sedation, drowsiness**



**Impaired postural stability**



**Hypoglycaemia**



**Hypothermia**



**Confusion**



**Dehydration**



**Vestibular damage (tinnitus, deafness)**



**Visual impairment (blurred vision, dry eyes)**



**Orthostatic hypotension**



**Drug induced Parkinsonism**

## Remember

The more risk factors a resident has, the more likely they are to fall. Medication is only one risk factor; others include:

- Motor problems
- Physical problems, e.g. not using mobility aids correctly
- Environmental problems, e.g. poor footwear

- Cognitive problems, e.g. poor memory resulting in trying to walk unaided
- Behavioural problems
- Cardiovascular problems
- Neurological problems.

## Key actions

- Prompt medication review for any resident who has an acute fall, to identify and review any medicines that may be contributing to their risk of falls.
- If there are any changes to a resident's mobility, balance, coordination or alertness inform the GP as this increases their risk of falls.
- To avoid orthostatic hypotension encourage the resident to:<sup>3</sup>
  - » Avoid sudden postural change, especially when getting up in the morning.
  - » Increase their non-caffeinated fluid intake to > 2 litres a day (about 3 litres if they weigh more than 75kg) where appropriate, some residents may be on a fluid restricted diet.
  - » Eat several small meals a day.
  - » Drink caffeine on rising and after meals.
  - » Lie propped up at night with a head up tilt of 15° – 20° (pillow height 20cm - 30cm).

## References

1. Darowski A, et al. Medicines and Falls in hospital: Guidance Sheet produced by John Radcliffe Hospital, Oxford, March 2011.
2. Freeland KN, Thompson AN et al. Medication Use and Associated Risk of Falling in a Geriatric Outpatient Population. The Annals of Pharmacotherapy 2012; 46 (9):1188-1192. Available at [http://www.medscape.com/viewarticle/770401\\_4](http://www.medscape.com/viewarticle/770401_4)
3. Dutta R. Falls in older people. Guidelines in Practice 2014; 17(6) 52-59. Available at [http://www.eguidelines.co.uk/eguidelinesmain/gip/vol\\_17/jun\\_14/dutta\\_muscu\\_jun14.php#.U7sYvtJdXBY](http://www.eguidelines.co.uk/eguidelinesmain/gip/vol_17/jun_14/dutta_muscu_jun14.php#.U7sYvtJdXBY)