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# Mistakes in drug doses common when elderly use inhalers

By Dominic Hughes Health correspondent, BBC News

Older people using inhalers run a greater risk of taking the wrong dose of medicine, according to new research from Leeds University.

It found that mistakes were most likely with inhalers rather than tablets, capsules or liquid medicines.

Researchers say people who are not getting the right doses run the risk of developing a chest infection.

They're calling for staff at care homes to get better training in the use of inhalers.

The study looked at 233 residents in 55 care homes across England and monitored their doses of medicines over two drug rounds.

In addition researchers looked at data collected from another recent study on the same group of care home residents.

The results showed that the chance of a mistake was 30 times higher when staff had to administer an inhaler rather than help a resident take some tablets.

There was also a greater chance of a mistake if the drugs were given in liquid form rather than tablets or capsules.

## “Start Quote

**Older people, wherever they live, must be able to expect regular reviews of their medication, which includes how it is being taken and what treatments are being used”**

**End Quote Michelle Mitchell Age UK**

Dr David Alldred of Leeds University School of Healthcare says care home staff need better training in the use of medical inhalers so that residents with breathing disorders get the treatment that they need.

"Medical inhalers are relatively complex devices and require a number of steps to be taken correctly in the right sequence. Even the simplest inhaler can be difficult to use correctly and this is particularly the case for older people.

"Approximately one in 10 care home residents will have been prescribed an inhaler-based medicine for some sort of respiratory disorder. If that condition is not treated correctly, their breathlessness will not be relieved and they may be at higher risk of developing a chest infection."

In a paper published in the journal BMJ Quality and Safety, the researchers say many inhaler mistakes happen because staff forget to shake the device, or staff give the wrong number of inhalations.

Residents sometimes also forget to hold their breath and so some of the medicine - in powdered form - escapes out of their mouths.

Poor understanding

In the study tablets or capsules accounted for more than half of medicines given to residents, 1 in 9 drugs were in liquid form and just 4% were inhalers.

Michelle Mitchell, Age UK's Charity Director, said the research is another example of how older people in care homes are having bad experiences with their medication.

"Many older people, particularly those living in a care home, rely on a daily regime of multiple medications to maintain a reasonable level of health and wellbeing. Where this includes less common treatments, like medicines in liquid form, it is no excuse for an increased risk of error.

"There is already an often poor understanding of the effect of certain treatments on older people, particularly when someone is taking a number of different drugs. Older people, wherever they live, must be able to expect regular reviews of their medication, which includes how it is being taken and what treatments are being used."

Nadra Ahmed, chairman of the National Care Association, said this is an important piece of research that would make people think carefully about the training of care staff.

"I would hazard a guess that most staff in the care sector would be aware about the administration of the correct drug dosage. But if better training safeguards vulnerable people we should ensure that it is part and parcel of a good training package."