

significantly better than during exposure. In the small number of workers with pre-existing asthma, the pattern of FEV₁ decline while exposed and following removal from exposure was not significantly different from the rest of the study group (data not shown).

In conclusion, in this group of workers with occupational asthma, FEV₁ declined rapidly at a rate of about 100 ml/year during exposure in the workplace. Removal from exposure was associated with a step-up in FEV₁ of about 12 ml in the first year, following which FEV₁ declined at a rate similar to healthy non-smoking adults.

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LUNG ALERT

Nursing home residents and pneumonia hospitalisation

▲ Loeb M, Carusone SC, Goeree R, et al. Effect of a clinical pathway to reduce hospitalizations in nursing home residents with pneumonia. *JAMA* 2006;**295**:2503-10

This study compared outcomes in 680 nursing home residents aged ≥ 65 years with pneumonia or lower respiratory tract infection treated in the community with a clinical pathway versus those treated in a standard manner. The primary outcome measure was hospital admissions. The admission rate in the pathway group was 10% (34/327) compared with 22% (76/353) in the standard group. This represents a weighted mean reduction in hospital admissions of 12% (95% CI 5 to 18, $p = 0.001$). The number of hospital days per resident was 0.79 in the clinical pathway group and 1.74 in the standard care group (weighted mean difference 0.95 days, 95% CI 0.34 to 1.55, $p = 0.004$). There was no significant difference between the two groups in health related quality of life, functional status, or mortality. The overall cost saving in the clinical pathway group was an average of \$1016 per resident.

This study demonstrates a reduction in hospital admissions with the use of a clinical pathway for the management of elderly nursing home residents with pneumonia. Similar clinical outcomes between the groups were reported, resulting in a significant reduction in healthcare costs. Whether such results are applicable outside North America, where the range of treatments available in nursing homes may be more limited, remains to be seen.

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