



# Should all nursing home residents be vaccinated?

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## DEBATT

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Some frail nursing home residents in Norway have died after being vaccinated against COVID-19. Vaccination is an important measure for preventing outbreaks and deaths in nursing homes, but some of the frailest residents with serious health problems should not be vaccinated.

Nursing homes in Norway and other countries have experienced multiple and serious outbreaks of COVID-19 with a high mortality rate (1, 2). As a result, the health authorities put nursing home residents at the top of the priority list for vaccination (3). Vaccination in Norwegian nursing homes started on 27 December 2020, and on 14 January 2021 the first reports emerged from the Norwegian Medicines Agency of deaths following vaccination (4). The deaths have raised the question of whether the recommendations for vaccinating the frailest members of society need to be differentiated, and specialist input has been called for from geriatric experts in Norway.

In this article we discuss some aspects that can be helpful both for health authorities and for doctors involved in selecting nursing home residents for vaccination.

## More adversely impacted by side effects

Older and frail residents in nursing homes have a high mortality rate and often a short life expectancy, even under normal circumstances. A total of 300–400 patients die every week in Norwegian nursing homes. Deaths in the period following vaccination are to be expected, and are not necessarily caused by the vaccine.

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However, very few frail older people have been included in the clinical trials.

We cannot therefore rule out the possibility that the risk of serious adverse effects from vaccination is higher among this group than in younger and healthier people. Based on our existing knowledge on geriatric patients, there is reason to believe that frail older people will be less able to tolerate mild or moderate adverse effects of the vaccine than younger and healthier people.

The main recommendation should still be to vaccinate the majority of patients in nursing homes

Due to greater susceptibility to external influences, including medication, it is not unlikely that adverse effects such as fever, nausea and vomiting may have more serious consequences for nursing home residents than for younger and healthier individuals. For example, a frail person who experiences dizziness or a drop in blood pressure as a result of a vaccine is at greater risk of a fall, with potentially serious consequences. We are aware that a few nursing home patients have been admitted to hospital with severe symptoms following vaccination. When frail patients with multimorbidity become acutely ill or suddenly experience reduced cognitive or physical function, it is often difficult to know for certain what is the main triggering factor. It can therefore be difficult to distinguish between adverse effects from vaccination and other causes of acute functional impairment.

## Enables easing of infection control measures

Infection control measures in nursing homes can be a major burden, especially for patients with dementia or in the final stages of life. The purpose of vaccination is therefore not only to reduce mortality, but also to ease the infection control measures and give older people the opportunity to have social contact with their loved ones. The risk of death and long-term effects on function and quality of life will be high in unvaccinated, frail patients, as will the risk of transmitting infection (5).

Although we currently have little knowledge about the efficacy and adverse effects of the vaccine in older and frail people, or whether these aspects vary between the different vaccines, there is reason to believe that the adverse effects will normally be mild and transient, also for this population group.

For patients with a very short life expectancy, vaccination can cause unnecessary discomfort without achieving the desired effect

Based on current knowledge, we therefore believe that the main recommendation should still be to vaccinate the majority of patients in nursing homes. For patients with a very short life expectancy (weeks or a few months), vaccination can cause unnecessary problems without achieving the desired effect, and in such cases the patient should not be vaccinated. In the case of older and frail patients who experience extremely unpleasant or serious adverse effects after the first dose of the vaccine, careful consideration should also be given to whether they should receive the second dose.

Deaths in frail nursing home residents following vaccination should be carefully investigated, and it is our recommendation that geriatric specialists are involved in this process.

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