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Asymptomatic carriers of SARS-CoV-2 in nursing homes

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Surprisingly many nursing home patients can be asymptomatic even after having tested positive for SARS-CoV-2. We would like to share our experience from contact tracing at a nursing home in Bergen.

When it became clear that nursing home patients were at risk of SARS-CoV-2 infection, a number of measures were enacted at the nursing home in question. After 16 March 2020, the nursing home residents could no longer receive visitors. Instructions and advice from the relevant authorities were complied with to the greatest possible extent. Consequently, staff members with symptoms of upper respiratory infection lasting for two days or more were tested for the coronavirus. A staff member who had experienced symptoms of upper respiratory infection was tested on 17 March. When the test result came back negative, this person was back at work from 24–29 March. This person then suddenly fell ill with cough, chills, back pain and fever, and was tested again on 30 March. This time the result, which came the next day, showed positive, and the staff member was isolated. On 30 March, a resident developed atypical symptoms in the form of a tendency to fall, increasing confusion and fever. The resident was tested on 31 March, and on the same day the laboratory reported a positive test.

We welcome the recent expansion of testing of asymptomatic persons

The municipal infection control office was consulted. We decided to test all staff members who had been in the ward in question over the previous 20 days, as well as all 28 remaining residents who had not yet been tested. Eight further residents tested positive, five of whom were asymptomatic and three had only minor symptoms that were consistent with COVID-19. As of 6 April, four of the nine infected residents remain asymptomatic, while one

has become seriously ill. Of the 60 staff members, two more tested positive, one of whom has since developed symptoms.

What we have learned

Because of the limited capacity for testing, the Norwegian Institute of Public Health initially recommended that persons who had no symptoms should not be tested (1). In our assessment, the situation at the nursing home indicated that testing was required in order to identify a situation that might have escalated. After thorough consideration, testing of all residents and staff on the ward in question was initiated. The result was that 10 of the 88 persons concerned tested positive. The majority of these had no symptoms that were considered relevant. The Norwegian Institute of Public Health has since revised its recommendation. The current advice states that 'persons with no symptoms should *normally* not be tested' (2). In our case, we considered testing of asymptomatic persons to be necessary in order to bring the infection under control.

Some carriers of SARS-CoV-2, the cause of COVID-19, are asymptomatic (3). This implies that staff in healthcare institutions may transmit the infection without being aware that they are carriers. The risk of infecting residents and colleagues must be reduced to a minimum through compliance with current procedures and use of personal protective equipment. We welcome the recent expansion of testing of asymptomatic persons, and believe that it is essential to consider this option in situations where the presence of asymptomatic carriers might be suspected. This applies especially to situations where it is difficult to fully ensure non-transmission of the infection to those who are at increased risk of a serious course of illness.

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