

## SYNOPSIS

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# Review of “Clinical characteristics of 24 asymptomatic infections with COVID-19 screened among close contacts in Nanjing, China”

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## One-Minute Summary

- The authors report the clinical characteristics of 24 coronavirus disease 2019 (COVID-19) **cases with asymptomatic infection** who were tested due to close contact with a known case. These patients were hospitalized in Nanjing, China from January 28 to February 18, 2020 following a throat swab testing positive by PCR.
  - **Median age was 32.5 years** (range 5 to 95 years) with **five (21%) below 15 years**.
- During hospitalization, **five (21%) developed symptoms consistent with COVID-19**, with a median **incubation period of eight days** (IQR 6-9). Compared to those without symptoms, these individuals:
  - Were **older**: median age 53 years (interquartile range [IQR]: 23-65) vs. 32 years (IQR: 15-57)
  - Had a **longer median period of viral shedding** (time from the first positive PCR test to the first day of consecutive negative test): 12 days (IQR: 12-14) vs. six days (IQR: 2-12)
- On admission, 12 (50%) had computed tomography (CT) lung imaging showing ground-glass opacities, while five (21%) showed stripe shadows. **Seven (29%) had normal CT imaging and had no symptoms throughout hospitalization**. Compared to other cases, these individuals:
  - Were **younger**: median age 14 years (IQR: 6-32) vs. 38 years (IQR: 27-65)
  - Had a **shorter median period of viral shedding**: Four days (IQR: 2-15) vs. 11 days (IQR: 6-12)
- No patients developed severe pneumonia or died.
- 18 (75%) patients were cleared of the virus with two consecutive negative PCR tests as of February 18 (range: one to 21 days).
  - Six (25%) retested as positive after having one negative result and one (4%) retested as positive after two consecutive negative PCR tests.
- One of the individuals, who remained asymptomatic throughout, was reported to have transmitted the virus to three cohabiting family members.

## Additional Information

- Eight (33%) individuals had recent travel to Hubei.

- Five individuals (21%) developed transient symptoms, which were attributed to reactions to antiviral or immunoglobulin treatment by a clinical expert panel.
- All 24 patients received interferon atomization therapy; 21 (88%) were given antiviral therapy; two (8%) received immunoglobulin therapy; and one (4%) received antibiotics, antifungal therapy and immunoglobulin therapy.
- No members of the family cluster believed to have contracted COVID-19 from the asymptomatic case (#13) reported any other contact with confirmed or suspect cases. The cluster included the wife (age 64), son (age 35) and daughter-in-law (age 36). All individuals were symptomatic (between three and eight days) before case #13 was diagnosed. The wife developed severe pneumonia and was admitted to the intensive care unit.

## PHO Reviewer’s Comments

- Although the authors comment that the likely source of infection in the family cluster was the asymptomatic case described in this study, COVID-19 cases were already reported in the province of Jiangsu (in which Nanjing city is located) prior to the study period, so the possibility of the family cluster acquiring COVID-19 from other unrecognized case(s) cannot be excluded.
- The period of viral shedding, as detected by PCR, does not always suggest communicability, since PCR testing is based on the detection of viral nucleic, which does not always indicate live virus.

## Citation

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