Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Outbreak investigation for COVID-19 in northern Vietnam

Two Vietnamese adults returned to their home province of Vinh Phuc in northern Vietnam on Jan 17, 2020, from Wuhan, China, where they had been living since Nov 15, 2019, for a business trip. They presented with mild respiratory symptoms to their local health facilities at 4 days and 8 days, respectively, after arrival in Vinh Phuc. Both individuals were initially placed into respiratory isolation in hospital. Case 1 tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative organism of coronavirus disease 2019 (COVID-19), on Jan 30, 2020, and remained in isolation until recovery. Case 2 was discharged from isolation in hospital after having one negative test result on Jan 28 (11 days after returning from Wuhan). Following discharge, the patient attended a family social function. 2 days later, she was readmitted after a second nasal swab for SARS-CoV-2 taken during her time in hospital was reported as positive.

Screening of 79 individuals who had been in contact with these two patients (namely, family members in the same household and anyone who had been within 2 m of them) was initiated on Jan 31. Six individuals from the same work team, who had also travelled from Wuhan on Jan 17, were isolated, and four of them tested positive for SARS-CoV-2 (cases 3, 4, and 8 in Vinh Phuc, and one case from another province). Five secondary cases were diagnosed within the social network of case 2. These included three household members (cases 6, 7, and 11) and two people who had attended the social function (cases 5 and 9; appendix p 1). Four of these individuals reported mild respiratory symptoms; the remaining patient was asymptomatic (case 7) at the time of diagnosis.

On Feb 8, 2020, increased contact investigation was commenced among an additional 343 contacts of the people returning from China and the secondary cases diagnosed in Vinh Phuc, with screening of contacts of any suspected cases, and health workers providing direct medical care. This ongoing investigation includes monitoring of body temperature and suspected symptoms daily. Those with symptoms have been quarantined at health facilities and tested for SARS-CoV-2. This additional cascade screening identified one further case, a boy aged 3 months (case 10) who had brief exposure to case 5 (his grandmother, aged 42 years) on Jan 28. He developed respiratory symptoms 9 days later (cough and rhinorrhoea) and tested positive for SARS-CoV-2 on Feb 11 (appendix pp 2). On Feb 13, when case 11, the father of case 2 and living in the same household, was identified, the resident commune (Son Loi) of case 2 was locked down. Residents were advised to stay in the commune, and body temperature and suspected symptoms in all residents were monitored daily by commune-based health workers reinforced by an external team. As of March 2, 18 days after case 11 was detected, no new cases have been identified.

In summary, this outbreak investigation identified six cases of COVID-19 resulting from transmission in Vietnam. One case occurred after secondary spread from a person who had not visited China. This case illustrates the importance of isolating patients and suspected cases for at least 14 days after exposure and of community-wide screening to enhance diagnosis of COVID-19.

We declare no competing interests.

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See Online for appendix