SYNOPSIS
03/09/2020

Review of “First cases of coronavirus disease 2019 (COVID-19) in the WHO European Region, 24 January to 21 February 2020”


One-Minute Summary

- This study reports the features of the first cases (N=47) of novel coronavirus 2019 (COVID-19) in the WHO European Region, up to February 21, 2020. Cases were reported in nine countries:
  - Belgium (n=1), Finland (n=1), France (n=12), Germany (n=16), Italy (n=3), Russia (n=2), Spain (n=2), Sweden (n=1) and the UK (n=9).
- Of 38 cases with epidemiological information (i.e., all except the nine reported in the UK):
  - The median patient age was 42 years (range: 2-81) and 25 (66%) were male.
  - 35 were hospitalized; of these, four developed viral pneumonia.
  - One case died. This individual from France was >65 years of age and was hospitalized for 21 days, requiring intensive care and mechanical ventilation for 19 days.
  - Mean duration from symptom onset to hospitalisation (available for n=29): 3.7 days (range: 0-10).
    - 2.5 days for cases imported from China and 4.6 days for those infected in Europe.
  - Median duration of hospitalization (available for n=16): 13 days (range: eight to 23 days).
- Of 35 cases with information on place of infection, 14 (40%) were infected in China and 21 (60%) were infected in Europe and linked to two clusters (Bavaria, Germany and Haute-Savoie, France).
- Of the 31 cases with information on symptoms at time of diagnosis, the most common were fever (65%), cough (45%) and weakness (26%). Two individuals were asymptomatic.
  - Mean duration from symptom onset to first positive laboratory test (n=16): 5.1 days.
    - 5.2 days for cases imported from China and 6.5 days for those infected in Europe.

Additional Information

- All cases were confirmed with real-time RT-PCR, but specimen types tested varied.
- In this study, place of infection was assessed at the national level based on an incubation period presumed to be up to 14 days, travel history and contact with probable or confirmed cases.
  - All imported cases (n=14) in this study had a history of travel to China.
• The 21 cases infected in Europe were linked to two clusters:
  • 14 cases linked to Bavaria, Germany that were reported from Germany and Spain; the index cases were reported to be infected in China.
  • Seven cases linked to Haute-Savoie, France that were reported from France, Spain and the UK; the index case was reported to be a UK national infected in Singapore.
• Time from symptom onset to hospitalization/case isolation was approximately three days longer for locally acquired cases than for imported cases. The authors note that people returning from affected areas are likely to have a low threshold to seek care and be tested when symptomatic; however, delays in identifying the index cases of the two clusters meant locally acquired cases took longer to be detected and isolated.
• Given the small sample size and limited completeness for some variables, the authors advise that all the results presented should be interpreted with caution.

PHO Reviewer’s Comments
• This study reported on the first 47 confirmed cases in the WHO European Region, as of February 21, 2020. Since then, the number of cases has rapidly increased, with 9,456 reported in 46 countries and two territories in the European Region, as of March 8, 2020, including 5,883 in Italy. This underscores how rapidly the COVID-19 situation is evolving.

Citation

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