

#### **SYNOPSIS**

03/03/2020

# Review of "Clinical characteristics of coronavirus disease 2019 in China"

**Article citation:** Guan W, Ni Z, Hu Y, Liang W, Ou C, He J, et al. Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med. 2020 Feb 28 [Epub ahead of print]. Available from: https://www.nejm.org/doi/full/10.1056/NEJMoa2002032

## **One-Minute Summary**

- This study describes the epidemiologic and clinical characteristics of **1,099 cases** of laboratory-confirmed coronavirus disease 2019 (COVID-19) from 552 hospitals in 30 provinces, autonomous regions or municipalities in China up to January 29, 2020.
- Female: 41.9%; Median age: 47 years (interquartile range [IQR]: 35–58), with 0.9% (9/1,099) patients <15 years
- Most common symptoms: fever (88.7% overall; 43.8% at initial presentation) and cough (67.8%)
- Median incubation period (based on 291 patients): Four days (IQR: 2–7)
- Median length of hospital stay: 12 days (IQR: 10–14)
- Clinical outcomes:
  - Death 1.4%
  - Discharged 5.0%
  - Remains hospitalized 93.6%
  - Recovered 0.8%
- The **most common complications** were pneumonia (91.1%), acute respiratory distress syndrome (3.4%) and septic shock (1.1%).
- **ICU admission** was required in 5.0% of patients.
- Patients with severe disease were older (median: 52 years, IQR: 40–65) vs. non-severe (median: 45 years, IQR: 34–57) and had more coexisting conditions (38.7%) vs. non-severe (21.0%).
- For all patients, the cumulative risk of the composite end point (i.e., admission to intensive care unit, mechanical ventilation or death) was 3.6%; for severe disease cases, the cumulative risk of the composite end point was 20.6%.

#### Additional Information

- Authors defined severe disease at admission using the American Thoracic Society guidelines for community-acquired pneumonia.
- Patient exposures:
  - Contact with person from Wuhan 72.3%
  - Resident of Wuhan 43.9%
  - Travel to Wuhan 31.3%
  - Health care worker 3.5%

- Wildlife contact 1.9%
- No link to Wuhan (no travel to Wuhan or contact with Wuhan residents) 25.9%
- Upon admission, **83.2% of patients had lymphocytopenia**, followed by thrombocytopenia (36.2%) and leukopenia (33.7%).
- The authors present an <u>epidemiological and clinical comparison</u> of COVID-19, SARS-CoV, MERS-CoV and seasonal influenza (see Table S3).

#### PHO Reviewer's Comments

None.

#### Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of "Clinical characteristics of coronavirus disease 2019 in China". Toronto, ON: Queen's Printer for Ontario; 2020.

#### Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication.

The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

### **Public Health Ontario**

Public Health Ontario is a Crown corporation dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

For more information about PHO, visit publichealthontario.ca.

