# Epidemiology & clinical management of COVID-19

CORONAVIRUS (COVID-19) UPDATE NO. 31 19 June 2020





# **Current global situation**

- Nearly 8.25 million COVID-19 cases globally
- Nearly 450 000 deaths

Top ten countries with the highest number of new cases over the past 24 hours:

Chile - 36 179 Brazil – 34 918 USA – 27 921 India - 12 881 Russian Federation – 7 790 Pakistan - 5 358 Saudi Arabia - 4 919 Mexico - 4 599 Peru - 4 164 South Africa - 4 078

Data as of 06h00 18.06.20





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# Current global situation

### Number of new deaths of COVID-19 per day, by WHO Region





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### Epidemiological characteristics COVID-19

This update covers two recently published reports on the epidemiological characteristics of COVID-19:

One from China<sup>1</sup> and one from The United States of America<sup>2</sup>

Time period analysed:

- China: From December 2019 to 20 February 2020
- USA: From 22 January to 30 May 2020

Cases and deaths

- China:
  - 75 565 total, 55 924 lab confirmed , 2114 deaths
  - Median age: 48 years (IQR: 39-63); 51,1% male
- USA:

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- 1 761 503 total, 1 320,488 lab confirmed, 103 700 deaths
- Median age: 48 years (IQR: 33-65); 48.9% female
- 1. http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51

2. https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s\_cid=mm6924e2\_w



### Age distribution of laboratory confirmed COVID-19 cases in China (01.12.19 – 20.02.20) and USA (22.01.20 – 30.05.20)



1. http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51

2. https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s\_cid=mm6924e2\_w

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### Case fatality ratio by age group for laboratory confirmed COVID-19 cases in China (01.12.19 – 20.02.20) and USA (22.01.20 – 30.05.20)



1. http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51

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# Proportion of cases of COVID-19 reporting selected symptoms – data from China (01.12.19 – 20.02.20) and USA (22.01.20 – 30.05.20)



1. http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51

2. https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s\_cid=mm6924e2\_w







### Reported underlying medical conditions for laboratory confirmed COVID-19 cases in China (01.12.19 – 20.02.20) and USA (22.01.20 – 30.05.20)



. http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51

2. https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s\_cid=mm6924e2\_w







### Disease severity in laboratory confirmed COVID-19 cases in China (01.12.19 – 20.02.20) and USA (22.01.20 – 30.05.20)

Disease severity	China	USA
Mild to moderate	80%	84%
Severe	15%	14%
Critical	5%	2%

USA data:

- Hospitalization was six times more frequent among patients with a reported underlying condition (45.4%) compared to those without such conditions (7.6%)
- Death occurred 12 times more often among patients with reported underlying conditions (19.5%) compared with those without such conditions (1.6%)

<sup>2.</sup> https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s\_cid=mm6924e2\_w





l. http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51

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### Clinical disease progression for COVID-19











# Care of suspected or confirmed mild COVID-19: symptomatic treatment

- Isolate to stop virus transmission, at a designated COVID-19 health facility, community facility or at home.
- Give symptomatic treatment such as antipyretics for fever and pain, adequate nutrition and appropriate rehydration.
- Counsel patients about signs and symptoms that should prompt urgent care.
- > Antibiotic therapy or prophylaxis are <u>not indicated</u>











### Care of moderate COVID-19 with pneumonia

- Isolate to stop virus transmission, at a designated COVID-19 health facility, community facility or at home. Patients with moderate illness may not require hospitalization.
- For patients at higher risk of severe disease, isolation in hospital is preferred.
- Antibiotics are not indicated unless there is clinical suspicion of a bacterial infection
- Monitor closely for signs or symptoms of disease progression.









### Care of severe COVID-19 with pneumonia

- Equip all areas for severely ill patients with functioning oxygen system.
- Closely monitor patients for signs of clinical deterioration, such as rapidly progressive respiratory failure and shock; respond immediately with supportive care interventions.
- Monitor patients for signs of thromboembolism or related conditions, such as stroke, deep venous thrombosis, pulmonary embolism or acute coronary syndrome.







### Recovery trial: Dexamethasone in ventilated COVID-19 patients

- Statement by trial investigators (University of Oxford)
- The results have not been published in a journal yet
- Over 6000 hospitalized patients were randomized to receive either dexamethasone (6 mg daily) or usual care for 10 days
- Dexamethasone was associated with significantly fewer deaths among patients compared with those given usual care
- Patients on oxygen: dexa group had one-fifth fewer deaths compared to usual care
- Patients on ventilator: dexa group had one-third fewer deaths compared to usual care
- For patients who didn't require oxygen or respiratory support, there was no observed additional benefit with dexamethasone

https://www.recoverytrial.net/news/low-cost-dexamethasone-reduces-death-by-up-to-one-third-in-hospitalised-patients-with-severe-respiratory-complications-ofcovid-19







## Upcoming events

Webinar: Public Health Emergency Operations Centres (PHEOCs) for COVID 19 Response.

Tuesday 23 June 14h00 Geneva time.

<u>Register</u>

Pre-conference of the 1st WHO infodemiology conference. 29 June 2020. <u>https://www.who.int/news-</u> <u>room/events/detail/2020/06/29/default-calendar/pre-conference-</u> <u>1st-who-infodemiology-conference</u>



