How Covid-19 compares with other outbreaks

Covid-19 spreads quickly like cold or flu but has killed over 370,000 in the last six months. **Clara Chong** compares the current pandemic with three previous outbreaks.

	TOTAL CASES	TOTAL DEATHS	FATALITY RATE: Calculated by taking death numbers over infection numbers
Covid-19	More than 6.2 million	More than 370,000	Less than 6%
H1N1	Around 1.5 billion	More than 280,000	About 0.02%
Sars	Around 8,000	774	9.6%
Mers	Around 2,500*	876	Around 35%

*As of March 31, based on WHO figures

Severe acute respiratory syndrome (Sars)

Nov 2002 to July 2003

Viral respiratory disease first identified in China in 2002. Caused by coronavirus Sars-CoV.

- Two to seven days before infected people show symptoms.
- People are most likely to be contagious only when they have symptoms such as fever or cough. Patients are most contagious during the second week of illness.

BASIC REPRODUCTION NUMBER (R0)

- Approximately three, which means one infected person spreads it to three others.

CURRENT STATUS

- The World Health Organisation (WHO) declared that the Sars outbreak had been contained in July 2003.

H1N1

Around March 2009

In early 2009, a new strain of influenza A H1N1 virus emerged and caused respiratory infections in humans. Because it was similar to a form of influenza that circulated in pigs since the 1918 influenza pandemic, it is commonly referred to as swine flu.

- People can be contagious one day before onset of illness.
- Most people will shed the virus and are possibly contagious for five to seven days after onset of illness.

BASIC REPRODUCTION NUMBER (R0)

- Estimated to be around 1.2 but the literature has conflicting estimates.

CURRENT STATUS

- The virus is now endemic and a "seasonal" influenza strain – constantly circulating among the population.

Middle East respiratory syndrome (Mers)

Around April 2012

A viral respiratory disease first identified in Saudi Arabia in 2012. Caused by coronavirus Mers-CoV.

- Takes five days in general for a person to become infectious.
- Median time from onset of illness to hospitalisation is approximately four days.

BASIC REPRODUCTION NUMBER (R0)

- More than one in certain hospital settings where infection is present.

CURRENT STATUS

- Still present in pockets in the Middle East but healthcare systems around the world are now more aware and vigilant, and relatively more prepared to deal with it.

Covid-19

Around Dec 2019

First reported by officials in Wuhan, China, in December 2019. Caused by coronavirus Sars-CoV-2.

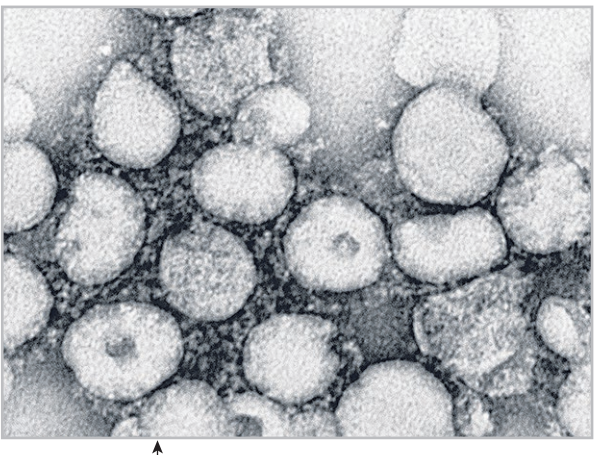
- Median incubation period of around five days. People may be infectious two days before the onset of symptoms.
- Most patients no longer pose a risk of spreading the disease after 11 days.

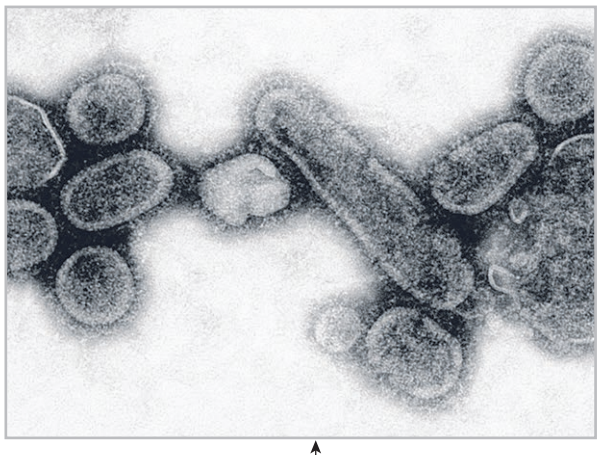
BASIC REPRODUCTION NUMBER (R0)

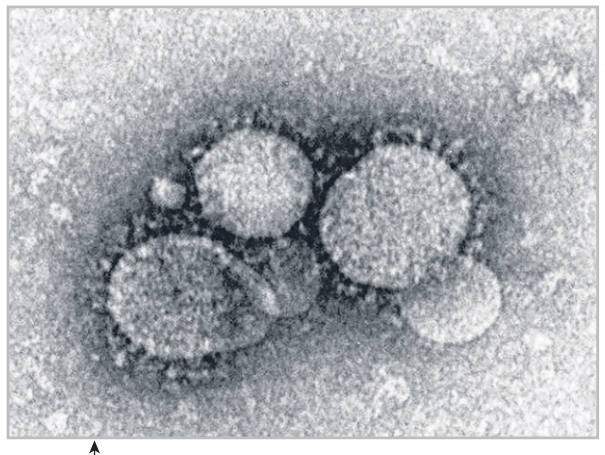
- Globally, the R0 for Covid-19 is estimated to be between two and three.

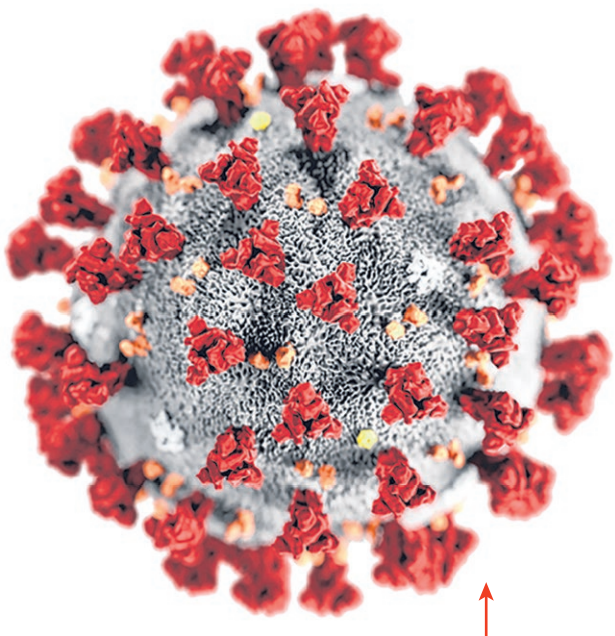
CURRENT STATUS

- Global pandemic.









2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020

NOTE: Figures as of May 31, 2020

Sources: WORLD HEALTH ORGANISATION, CENTERS FOR DISEASE CONTROL AND PREVENTION, MAYO CLINIC, WORLDOMETER, REUTERS, BEAN A, BAKER M, STEWART C ET AL. STUDYING IMMUNITY TO ZOONOTIC DISEASES IN THE NATURAL HOST – KEEPING IT REAL. NATURE REVIEWS: IMMUNOLOGY 2013;13:851-61

PHOTOS: CDC, REUTERS STRAITS TIMES GRAPHICS