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HOSPITALISATION AND MORTALITY AMONG COVID-19 POSITIVE PATIENTS
IN CHINA AND ITALY

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Suggested Citation: Street, T., (17 March 2020). *Hospitalisation and mortality among covid-19 positive patients in China and Italy*. ANU College of Health and Medicine COVID-19 Evidence Team, Canberra, Australia.

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HOSPITALISATION AND MORTALITY AMONG COVID-19 POSITIVE PATIENTS IN CHINA AND ITALY BY AGE-GROUP

CHINA

Mortality summary

Among the 44 672 confirmed cases of COVID-19 in mainland China, there were a total of 1023 deaths, with a crude case fatality rate of 2.3% and a case fatality rate of 0.015 / 10 person-days. The highest crude case fatality rate in the age group ≥ 80 years was 14.8%.

Mortality by age

TABLE 1. Patients, deaths, and case fatality rates, as well as observed time and mortality for n=44,672 confirmed COVID-19 cases in Mainland China as of February 11, 2020.

Baseline characteristics	Confirmed cases, N (%)	Deaths, N (%)	Case fatality rate, %	Observed time, PD	Mortality, per 10 PD
Overall	44,672	1,023	2.3	661,609	0.015
Age, years					
0–9	416 (0.9)	–	–	4,383	–
10–19	549 (1.2)	1 (0.1)	0.2	6,625	0.002
20–29	3,619 (8.1)	7 (0.7)	0.2	53,953	0.001
30–39	7,600 (17.0)	18 (1.8)	0.2	114,550	0.002
40–49	8,571 (19.2)	38 (3.7)	0.4	128,448	0.003
50–59	10,008 (22.4)	130 (12.7)	1.3	151,059	0.009
60–69	8,583 (19.2)	309 (30.2)	3.6	128,088	0.024
70–79	3,918 (8.8)	312 (30.5)	8.0	55,832	0.056
≥ 80	1,408 (3.2)	208 (20.3)	14.8	18,671	0.111

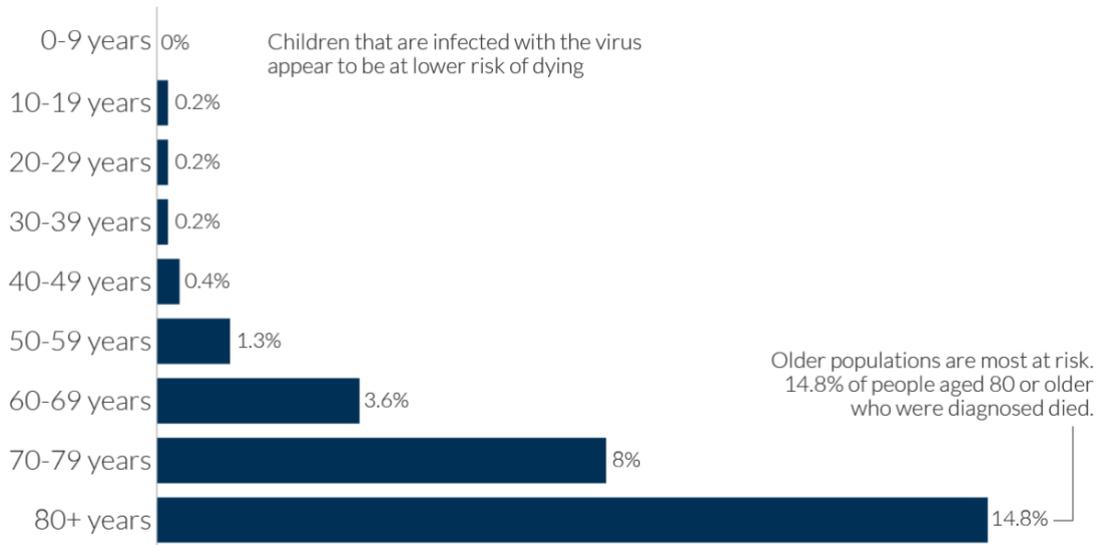
Source: The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) — China, 2020[J]. China CDC Weekly, 2020, 2(8): 113-122.

[Link to source](#) (full paper and tables)

Coronavirus: early-stage case fatality rates by age-group in China



Case fatality rate (CFR) is calculated by dividing the total number of deaths from a disease by the number of confirmed cases. Data is based on early-stage analysis of the COVID-19 outbreak in China in the period up to February 11, 2020.



Data source: Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. *Vital surveillances: the epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19)—China, 2020*. China CDC Weekly.

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Hospitalisation of confirmed COVID-19 patients by age

Results from a study including data from 191 patients (135 from Jinyintan Hospital and 56 from Wuhan Pulmonary Hospital), of whom 137 were discharged and 54 died in hospital:

- 54 patients died during hospitalisation and 137 were discharged. The median age of the 191 patients was 56 ± 0 years (IQR 46 ± 0–67 ± 0), ranging from 18 years to 87 years, and most patients were male.
- Comorbidities were present in nearly half of patients, with hypertension being the most common comorbidity
- The median time from illness onset (ie, before admission) to discharge was 22 ± 0 days (IQR 18 ± 0–25 ± 0), whereas the median time to death was 18 ± 5 days (15 ± 0–22 ± 0; table 2).

(Source: Zhou et al 2020)

National age distribution of confirmed cases in China

- The patients were concentrated between 30 and 79 years old.
- The proportion of this age group in the total number of confirmed cases was 89.8% in Wuhan, 88.6% in Hubei (including Wuhan), and 86.6% in the country (including Hubei).
- The proportion of cases in the elderly group over 60 years old was 44.1% in Wuhan, 35.1% in Hubei (including Wuhan), and 31.2% in China (including Hubei).

[Link to source.](#)

Mortality by age

Report by the Higher Institute of Health, Italy— an analysis of the data of 105 Italian patients who died on 4 March, conducted by the Istituto Superiore di Sanità. The Report concerns 73 patients who died in Lombardy, 21 in Emilia Romagna, 7 in Veneto and 3 in the Marche region.

- 56.6% of those deceased were over 80 years old
- The average age of deceased and positive COVID-2019 patients is 81 years, they are mostly men and in more than two thirds of cases they have three or more pre-existing pathologies.
- The majority of deaths (42.2%) occurred in the age group between 80 and 89 years, while 32.4% were between 70 and 79, 8.4% between 60 and 69, 2.8% between 50 and 59 and 14.1% over 90 years.
- Women who died after contracting COVID-19 are older than men (median age women 83.4 - median age men 79.9).
- The median time from the onset of symptoms to hospitalization was 5 days and the median of the time between hospitalization and death was 4 days.

[Link to source.](#)

Hospitalisation of confirmed COVID-19 patients by age

- Publicly available data indicate that ICU admissions (n = 556) represented 16% of all patients (n = 3420) who tested positive for COVID-19. As of March 7, the current total number of patients with COVID-19 occupying an ICU bed (n = 359) represents 16% of currently hospitalized patients with COVID-19 (n = 2217). All patients who appeared to have severe illness were admitted for hypoxic respiratory failure to the COVID-19 dedicated ICUs (Source: Graselli et al, 2020).
- According to a [report](#) in the NYT, Carlo Palermo, president of the association representing Italy's public hospital doctors, said that "about 50 percent of the people who tested positive for the virus required some form of hospitalization."
- One in five coronavirus positive patients is between 19 and 50 years old according to an [analysis](#) by the Istituto Superiore di Sanità. Out of 8342 positive cases as of 9 March, 1.4% are under the age of 19, 22.0% are in the 19-50 range, 37.4% between 51 and 70 and 39.2% are over 70, for a median age of 65. 62.1% is represented by men. There are 583 positive health workers. **24% of the cases examined are hospitalized.**