

2019-nCoV Update

UPDATED 2.4.2020 11:00 AM

Celeste Philip, MD, MPH
Health Officer

COMMUNICABLE DISEASE CONTROL
DISEASE CONTROL INVESTIGATION
EPIDEMIOLOGY AND EVALUATION



sonoma county
DEPARTMENT OF HEALTH SERVICES

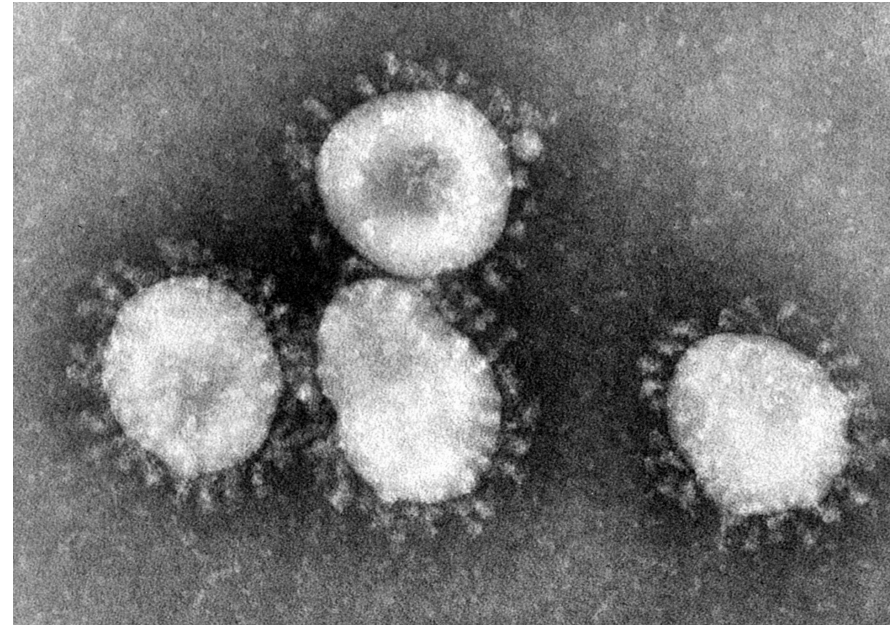
Background

- Novel coronavirus identified in December 2019 in Wuhan City, Hubei Province, China
- Initially detected as a cluster of pneumonia cases with exposure to a local open-air market



About Coronaviruses

- Enveloped, single-strand RNA virus infecting both animals and humans
- The four most common strains circulate worldwide – significant contributor to the “common cold”



MERS-CoV and SARS-CoV

Animal coronaviruses have also caused epidemics in humans:

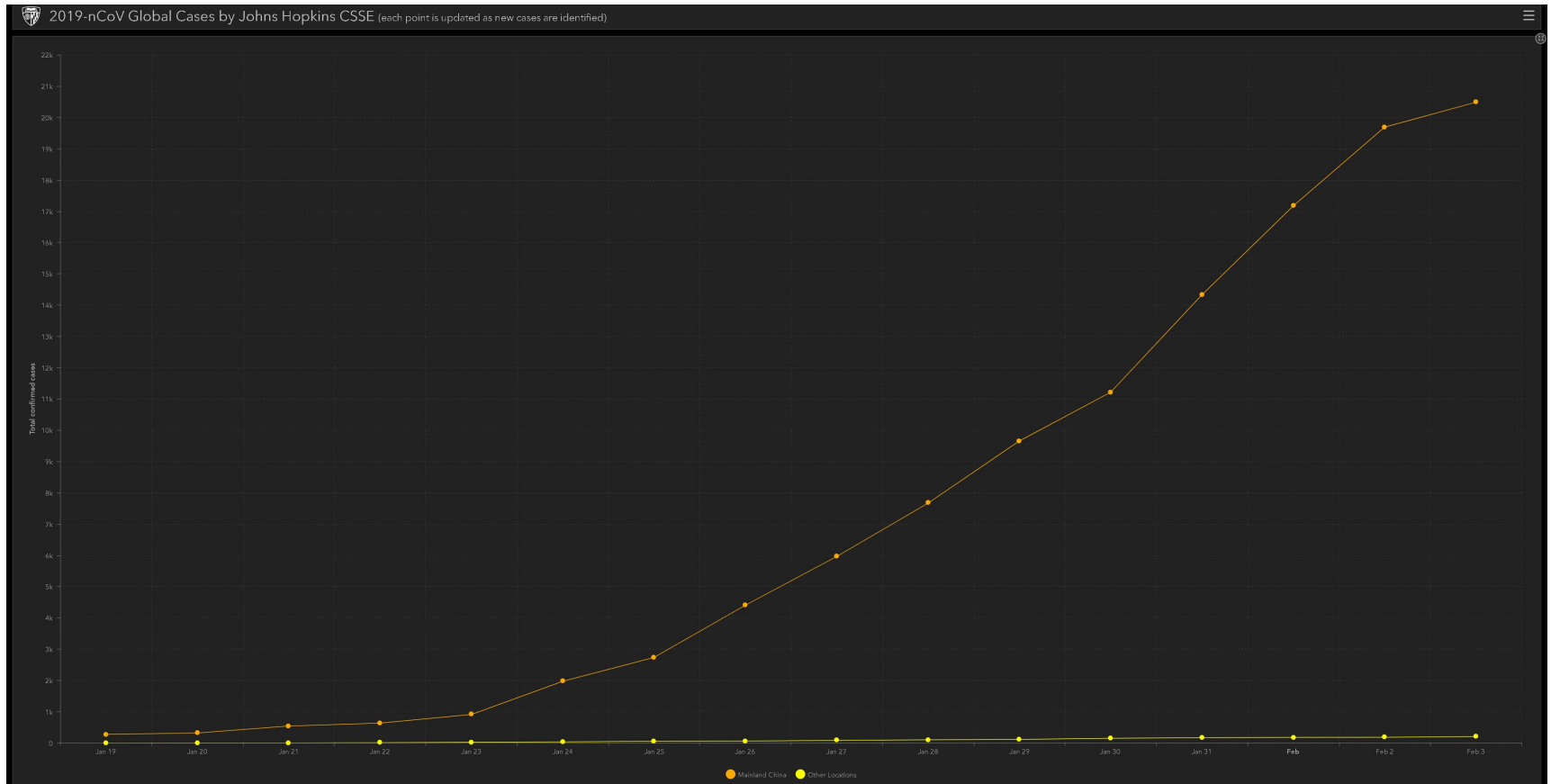
- **Severe Acute Respiratory Syndrome (SARS)**
 - 2002-2004 caused 8,093 cases with 774 deaths (9.5% CFR)
 - Cases identified in China, Hong Kong, Taiwan and Toronto, Canada
 - 8 cases identified in US residents, all with travel exposure
 - Bats identified as reservoir, likely transmitted via civets
- **Middle East Respiratory Syndrome (MERS)**
 - 2012-present caused 2,494 cases with 858 deaths (34% CFR)
 - Majority of cases in Saudi Arabia
 - 2 cases identified in US residents with travel to Saudi Arabia
 - Bats identified as reservoir, likely transmitted via camels

Situation Update

2.4.2020 8:00 AM

- Risk in California and the US is currently low
- 20,684 confirmed cases worldwide
 - Majority in mainland China (N=20,490)
- 427 deaths (2% CFR)
 - All but two in mainland China (1 Philippines, 1 Hong Kong)
- Preliminary epi characteristics:
 - Broad spectrum of illness (mild to respiratory failure and death).
 - Mean incubation period is ~5 days (estimated range 2-10 days).
 - In an analysis of the first 425 patients hospitalized with pneumonia, half were aged 60 or older.
 - A separate case series of hospitalized cases with pneumonia, half had underlying medical conditions, most often cardiovascular, cerebrovascular, and diabetes.

Reported Cases Worldwide by Day



US Testing

2.3.2020 8:00 AM

People Under Investigation (PUI) in the United States*†

As of 2/3/2020

Positive	11
Negative	167
Pending [§]	82
Total	260

*Cumulative since January 21, 2020.

†Numbers closed out at 7 p.m. the night before reporting.

§Includes specimens received and awaiting testing, as well as specimens in route to CDC.

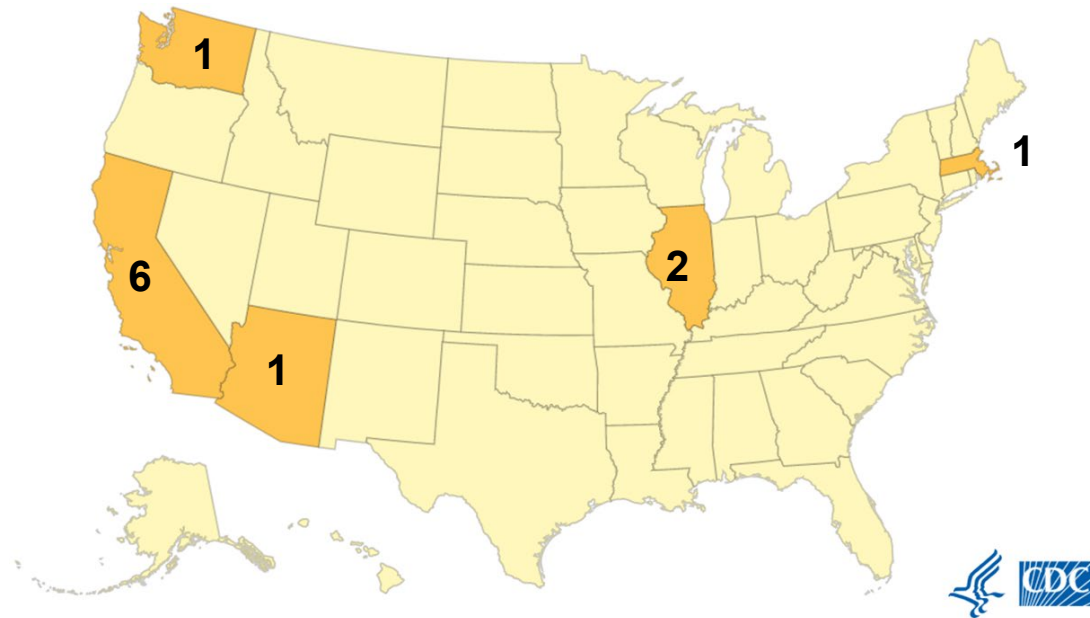
Number of states with PUI: 36

Cases in the US

2.4.2020 8:00 AM

There have been 11 confirmed cases in the US

- 9 among travelers returning from Wuhan.
- 2 among spouses of a confirmed case.
- States include WA, CA, AZ, IL and MA



Cases in CA

2.4.2020 8:00 AM

Six cases confirmed in California:

- 2 in San Benito County
Husband w/travel to Wuhan, transmitted to wife in US
- 2 in Santa Clara County
Unrelated to each other, both with travel to Wuhan
- 1 in Los Angeles County
Chinese traveler connecting via LAX
- 1 in Orange County
Adult with travel to Wuhan



Criteria for Testing

2.4.2020 8:00 AM

Clinical Features	&	Epidemiologic Risk
Fever ¹ or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	AND	Any person, including health care workers, who has had close contact ² with a laboratory-confirmed ^{3,4} 2019-nCoV patient within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)	AND	A history of travel from Hubei Province , China within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization ⁴	AND	A history of travel from mainland China within 14 days of symptom onset

Sonoma County Response

- Dissemination of Health Alert 1.31.2020.
- Rapid assembly of Incident Management Team.
- Proactive communication with local healthcare providers via health advisory and HCC calls.
- Participation on weekly calls with CDC, CDPH and EMSA.
- Implementation of 911 call screening for travel history and symptoms consistent with PUI description.
- Development of standard assessment questions for EMS responders and implementation of documentation requirements for EMS patient care reporting.
- Communication with public and other local groups.

National Response

- US Declared a Public Health Emergency and has barred entry to non-US citizens who have traveled to China in the previous 14 days (excluding Hong Kong and Macau).
- US Department of State issued a Level 4 Warning (Do not travel) to China on 2.2.2020.
- Citizens returning to the US with travel to China in previous 14 days subject to mandatory health screening and 14 day quarantine (effective 2.3.2020).
- Flights from China diverted to 11 US airports (includes SFO and LAX).

Global Response

- On 1.30.2020 the WHO declared the 2019-nCoV a Public Health Emergency of International Concern (PHEIC)
 - WHO will coordinate the global response, make recommendations, and support all countries affected.
 - Effort requires transparency, collaboration and open data sharing.

Proposed Guidance for Schools and School Districts

- Starting 2.3.2020, returning travelers from China should be excluded from school for a period of 14 days following departure.
 - Travelers arriving from China prior to 2.3.2020 are at lower risk and do not need to be excluded.
 - If a child or staff member has recently traveled to an area experiencing an outbreak of 2019-nCoV AND has symptoms of respiratory illness, this person should be sent home immediately and the local health department contacted.
- **At this time, there is low risk to residents of California from 2019-nCoV, but schools can take common-sense precautions to prevent the spread of all infectious diseases.**

References

- Zhu N, Zhang D, Wang W, et al. [A novel coronavirus from patients with pneumonia in China, 2019](#). N Engl J Med. DOI: 10.1056/NEJMoa2001017.
- Li Q, Guan X, Wu P, et al. [Early transmission dynamics in Wuhan, China of novel coronavirus-infected pneumonia](#). N Engl J Med. DOI: 10.1056/NEJMoa2001316.
- Chen N, Zhou M, Dong X, et al. [Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study](#). Lancet. DOI: 10.1016/S0140-6736(20)30211-7
- CDC. 2019 [Novel Coronavirus \(2019-nCoV\) in the U.S.](#) Updated 1/29/2020
- John's Hopkins Center for Systems Science and Engineering. [2019-nCoV Dashboard](#). Updated 1/30/2020.
- CDC. [Interim Guidance for Healthcare Professionals](#). Updated 1/30/2020.