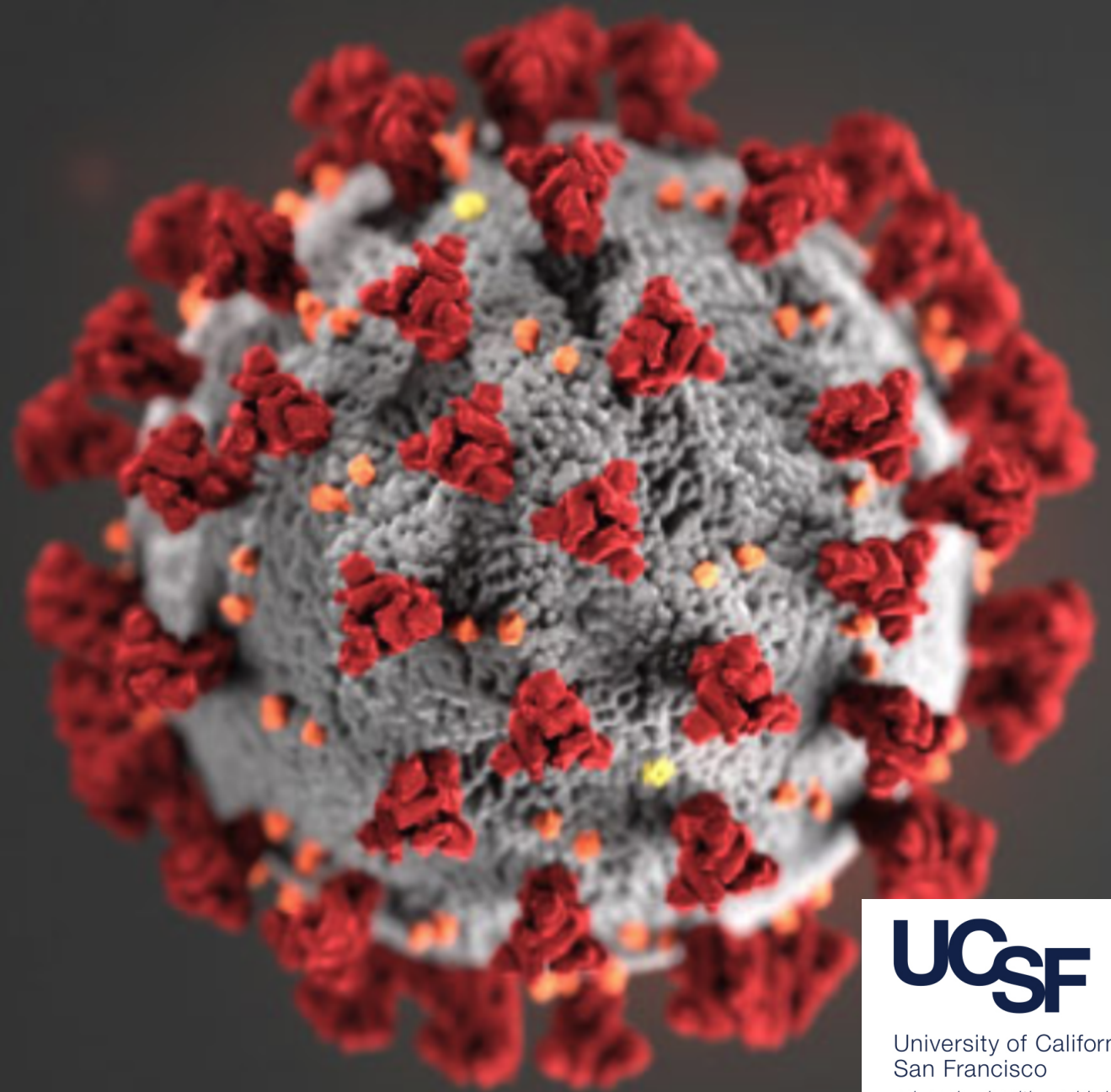


Facial Masking and COVID-19:

Reducing Transmission and Severity of Disease

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Face Mask Recommendations

APRIL 3, 2020:

CDC recommended cloth face coverings due to frequency of asymptomatic transmission – “protect others”

SEPTEMBER, 2020:

State of California and City of San Francisco expands message to recommend mask wearing to “protect others and yourself”

Which Masks Are Best for COVID-19?

✓ **Best**



Surgical mask



Multi-layered cloth mask



Good fit

Can be secured over nose, behind ears or around head, and under chin



Tightly woven or high thread count cotton or cotton blend

✓ **Good**



Single-layer cloth mask



Lower thread count cotton, silk, linen, polyester

✗ **Not recommended**



Knitted mask



Mask with vents



Folded bandana



Poor fit

Noticeable gaps, holes or vents



Unbreathable material such as plastic or leather



Overly porous material such as nylon or fleece

COVID-19



More info at
[PreventEpidemics.org](https://www.PreventEpidemics.org)

#KnowCOVID
#PreventEpidemics

Masks Combat COVID-19



Decrease transmission

Decrease morbidity by
reducing the amount
of symptomatic cases

Facial masking reduces transmission

RESEARCH LETTER

JAMA®

**Association Between Universal Masking
in a Health Care System and SARS-CoV-2 Positivity
Among Health Care Workers**

Absence of Apparent Transmission of SARS-CoV-2 from Two
Stylists After Exposure at a Hair Salon with a Universal Face
Covering Policy — Springfield, Missouri, May 2020

**“Widespread mask wearing
could get pandemic under
control in 4, 6, 8 weeks”-**

*Director Dr. Robert Redfield, CDC
Director, July 14*



**Two hair stylists with COVID-19 spent
at least 15 minutes with 139 clients**

- Everyone wore face coverings
- Zero transmissions among 67 clients tested

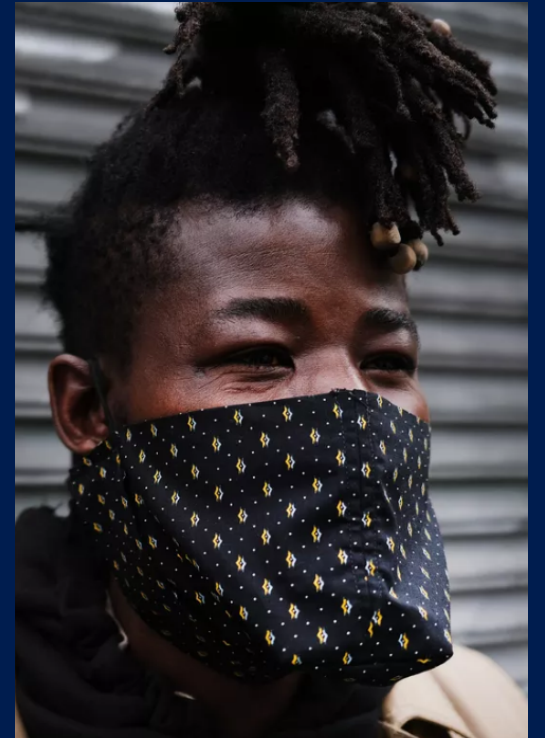
Masking reduces the amount of virus you are exposed to, reducing the severity of the disease



90-95% viral particles filtered



65-85% viral particles filtered
depending on cloth/proper use



Masks can help reduce symptomatic cases

CDC estimated
40% of all cases
on July 10 were
asymptomatic

VIROLOGIC EVIDENCE



Hamsters given SARS-CoV-2 at higher doses get more sick and masked hamsters get less sick

EPIDEMIOLOGIC EVIDENCE

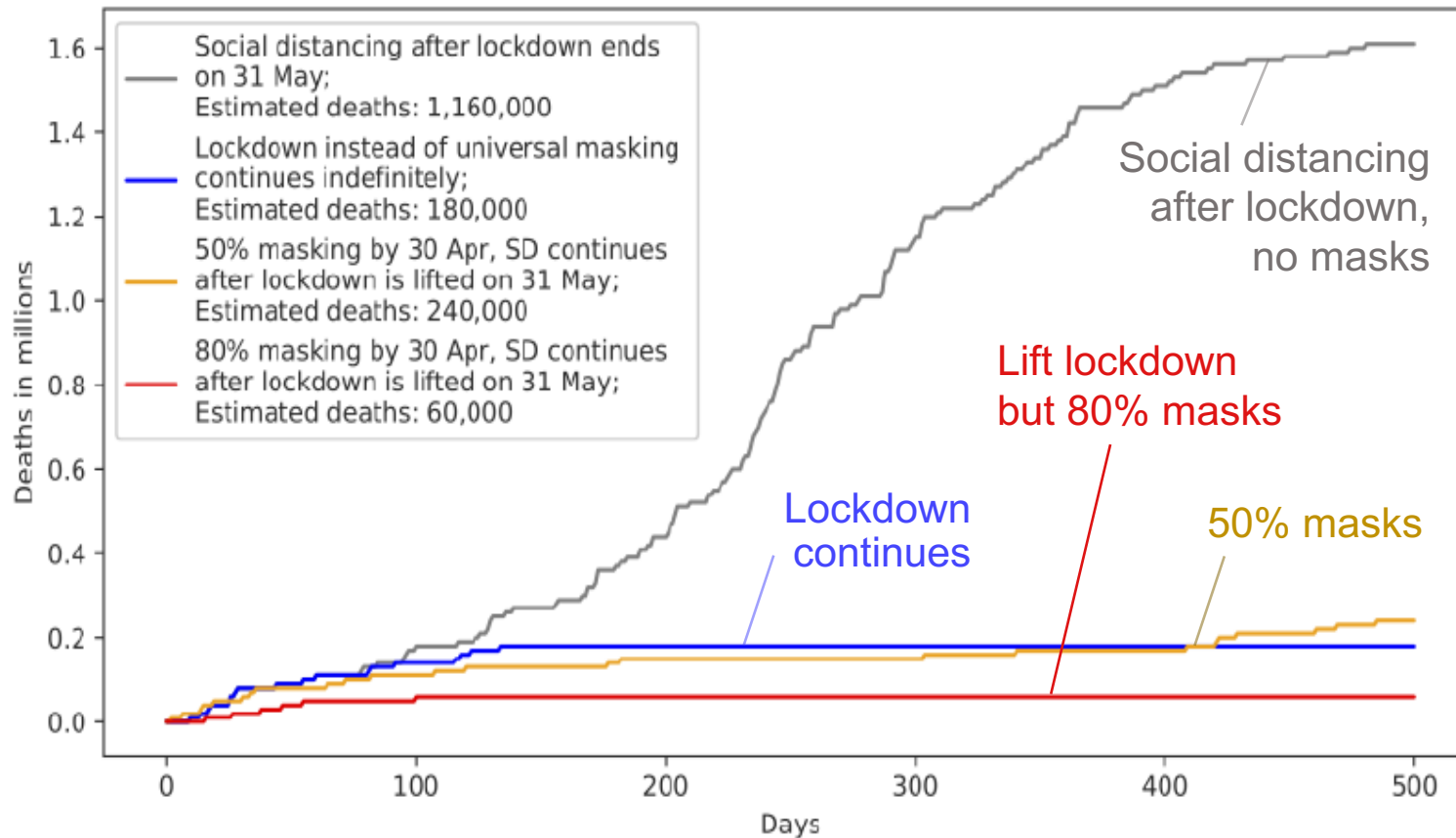
- 81% asymptomatic in **cruise ship outbreak** that masked
- 95% asymptomatic in **food processing plants** after masking
- 95% asymptomatic in **jails** with distancing and masking

Do we see rates of asymptomatic infection increasing under “masked” conditions?

- Appears true
- In countries accustomed to masking since SARS (Hong Kong, Taiwan, Thailand, South Korea, Singapore, Vietnam), cases up with opening but not deaths
- Highest death rates in the US occurred in its first wave, before CDC recommended mask wearing on April 3

CITY	CASES/1,000	DEATHS/100,000	DEATH PER CASE (%)	MASK GUIDANCE
San Francisco	11.2	9.7	0.87	April 17
Miami	58.9	95.7	1.63	June 22
Atlanta	23.8	49.9	2.09	July 8
Los Angeles	23.6	57.1	2.42	May 14
Denver	18.4	69.5	3.77	May 5
Boston	28.5	137.6	4.83	May 1
Washington DC	20.1	86.7	4.31	May 16
Baltimore	17.7	56.0	3.17	April 18
Philadelphia	21.7	111.0	5.12	April 18
Seattle	8.8	32.5	3.68	May 18
New York City	27.4	281.3	10.26	April 15

One model shows – after lockdown lifts - universal masking will keep death rates low



Lowest death rate
requires 80% compliance
rate with masking

Lockdown is a blunt
instrument but masking
takes behavior change

Masks can help reduce symptomatic cases

Reduce Transmission

Facial masking
reduces transmission,
and may reduce
severity of disease
by reducing severity
of infection

Control

Pillar of pandemic
control for now

Mortality

Mortality may be
decreasing due to
masking and from
better treatments

Advice for Mayors



Key Tool

Masking is a key tool to reduce exposure, but necessary to combine with other tools we have (i.e. social distancing, hand washing)

- New data shows that providing data to essential workers increases use of masks



Enforcement

If possible, implement mask mandates including enforcement mechanisms



Data

Advocate with data when talking with other levels of government



Communication

Use effective communications and community engagement to explain importance of mask wearing and correct wearing of masks

- Use “bully pulpit”
- Display signage and other city communications



Monitoring

Monitor mask wearing (e.g. surveys to identify proportion of people wearing masks)