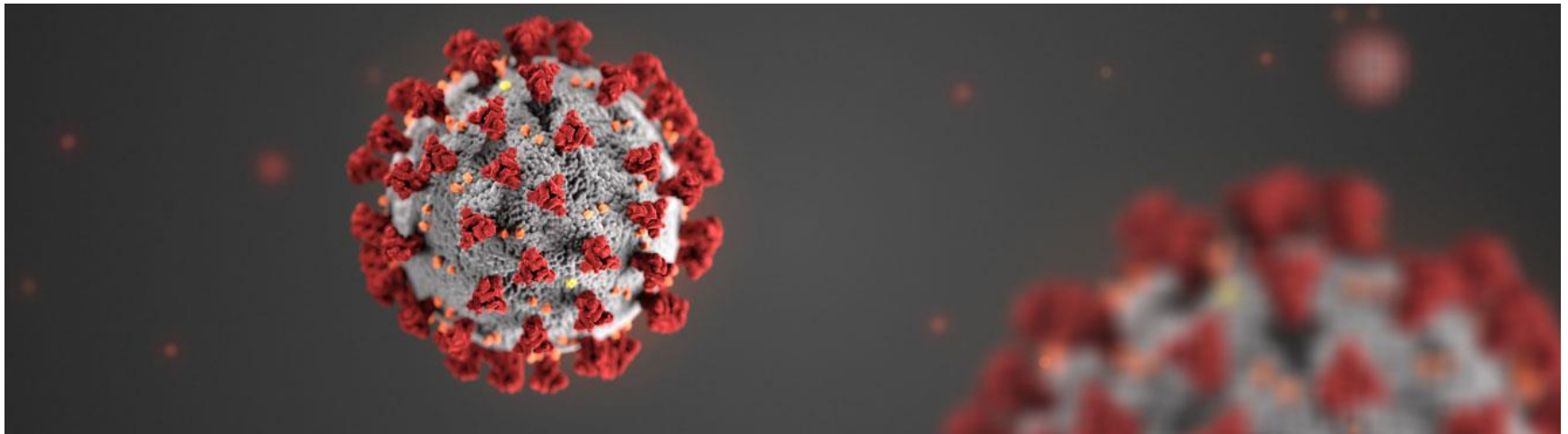


National Center for Disaster Preparedness

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COVID-19 **What it is, what we know, and what we** **don't know**

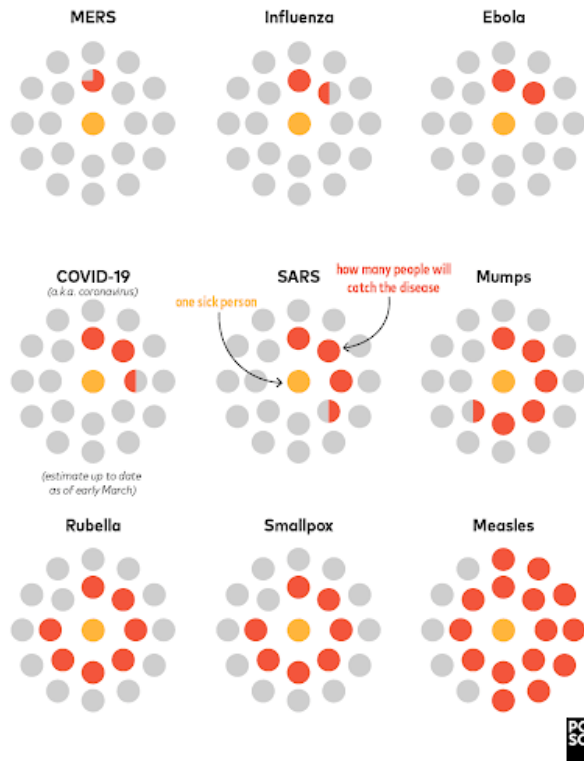
April 28, 2020



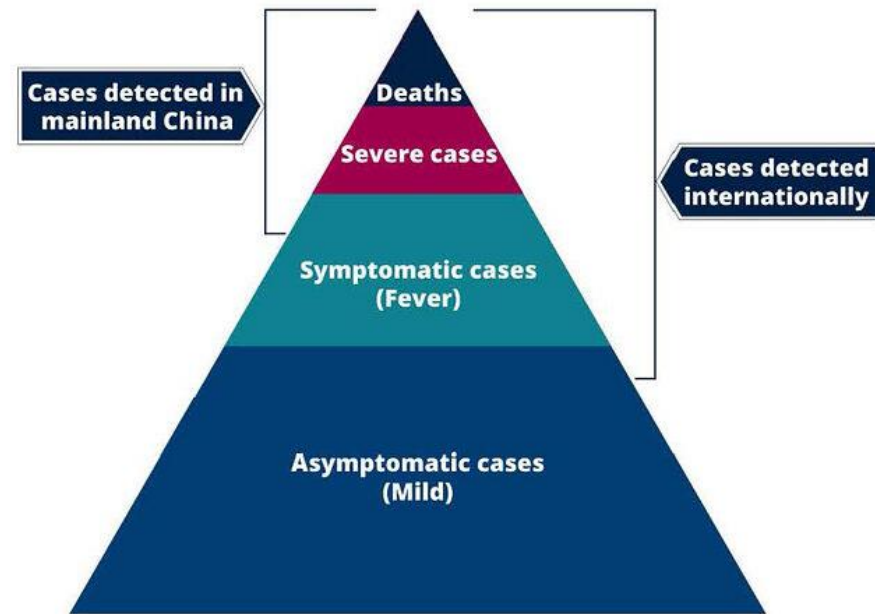
What makes some pandemics worse than others ?

How easily it spreads*

* COVID-19 estimates are changing as more information is learned.



How deadly it is*

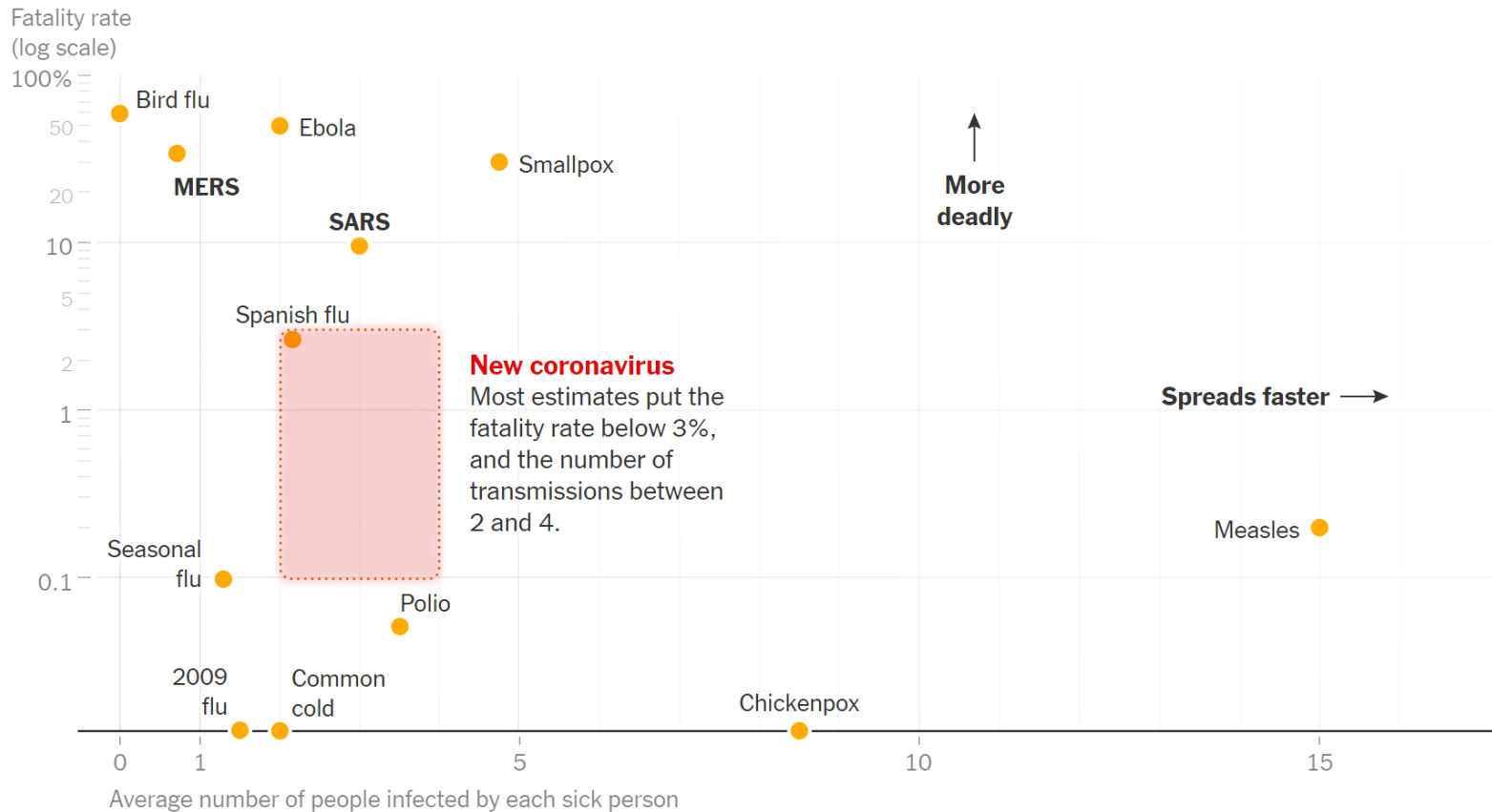


Source: Popular Science
<https://www.popsci.com/story/health/how-diseases-spread/>

Source: Cato Institute
<https://www.cato.org/blog/misleading-arithmetic-covid-19-death-rates>

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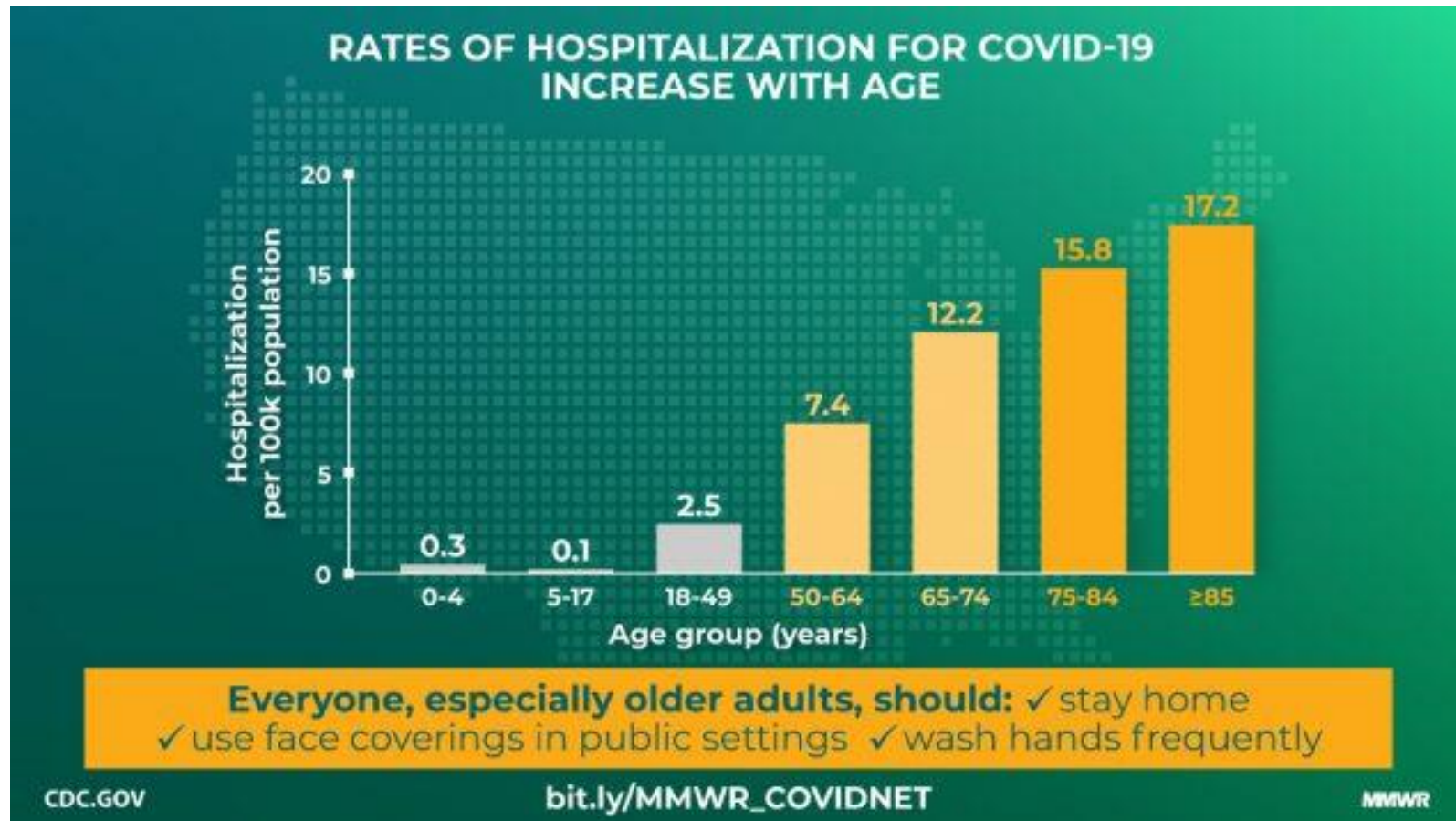
There is a lot of uncertainty with COVID-19



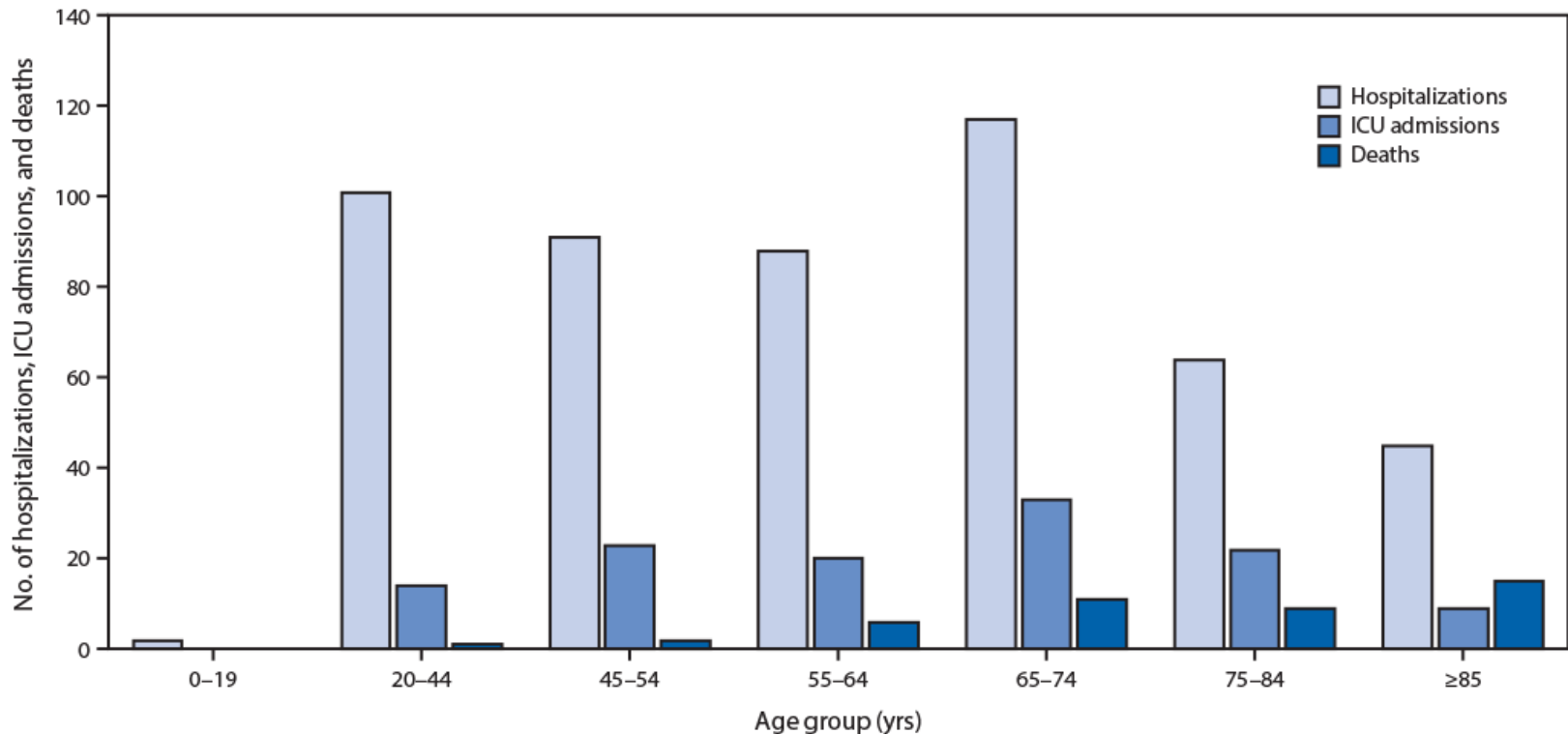
Note: Average case-fatality rates and transmission numbers are shown. Estimates of case-fatality rates can vary, and numbers for the new coronavirus are preliminary estimates.

Source: Sheikh, K., Watkins, D., Wu, J., & Gröndahl, M. (2020). How Bad Will the Coronavirus Outbreak Get? Here Are 6 Key Factors. The New York Times.
<https://www.nytimes.com/interactive/2020/world/asia/china-coronavirus-contain.html>

Who is (currently) getting sicker than others?

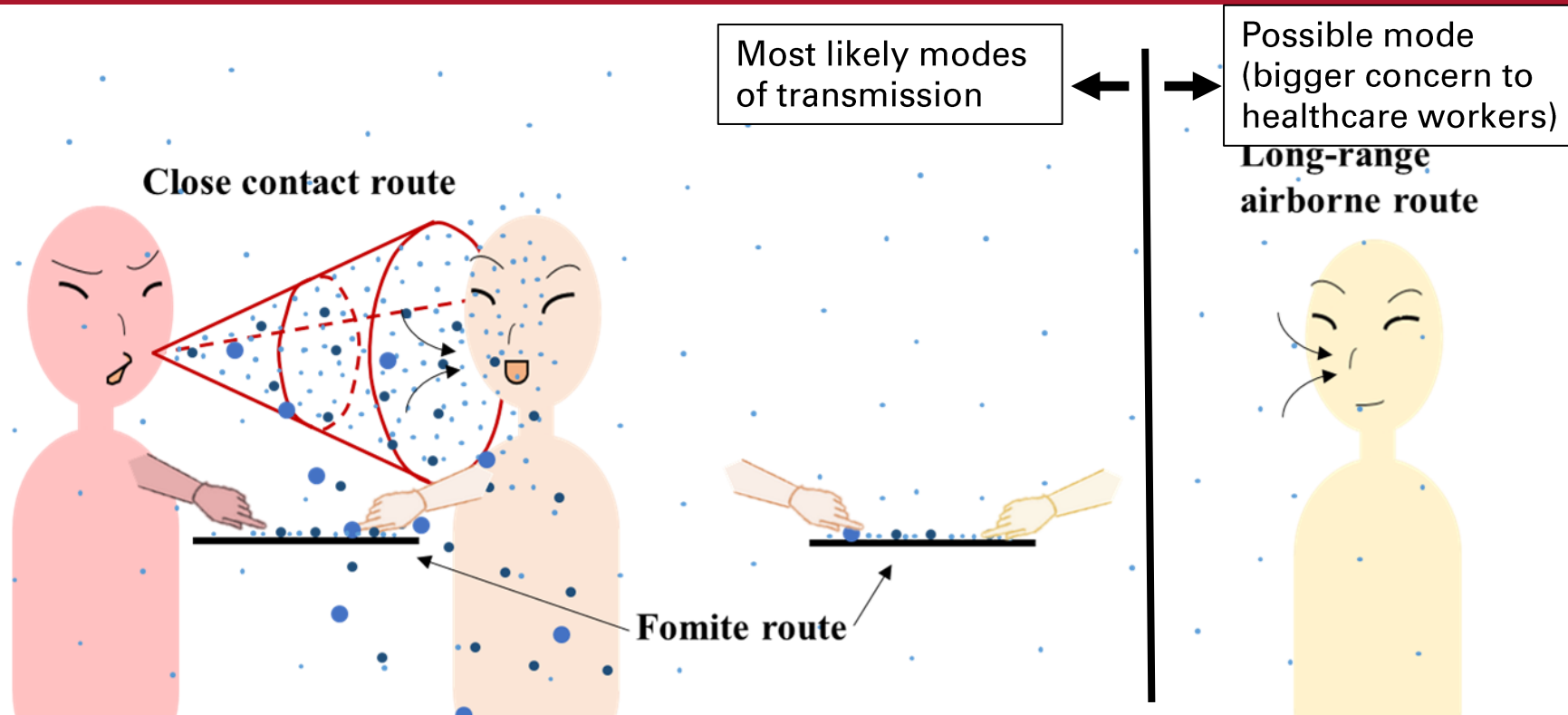


Younger people are having serious complications (*proportions of cases unknown)



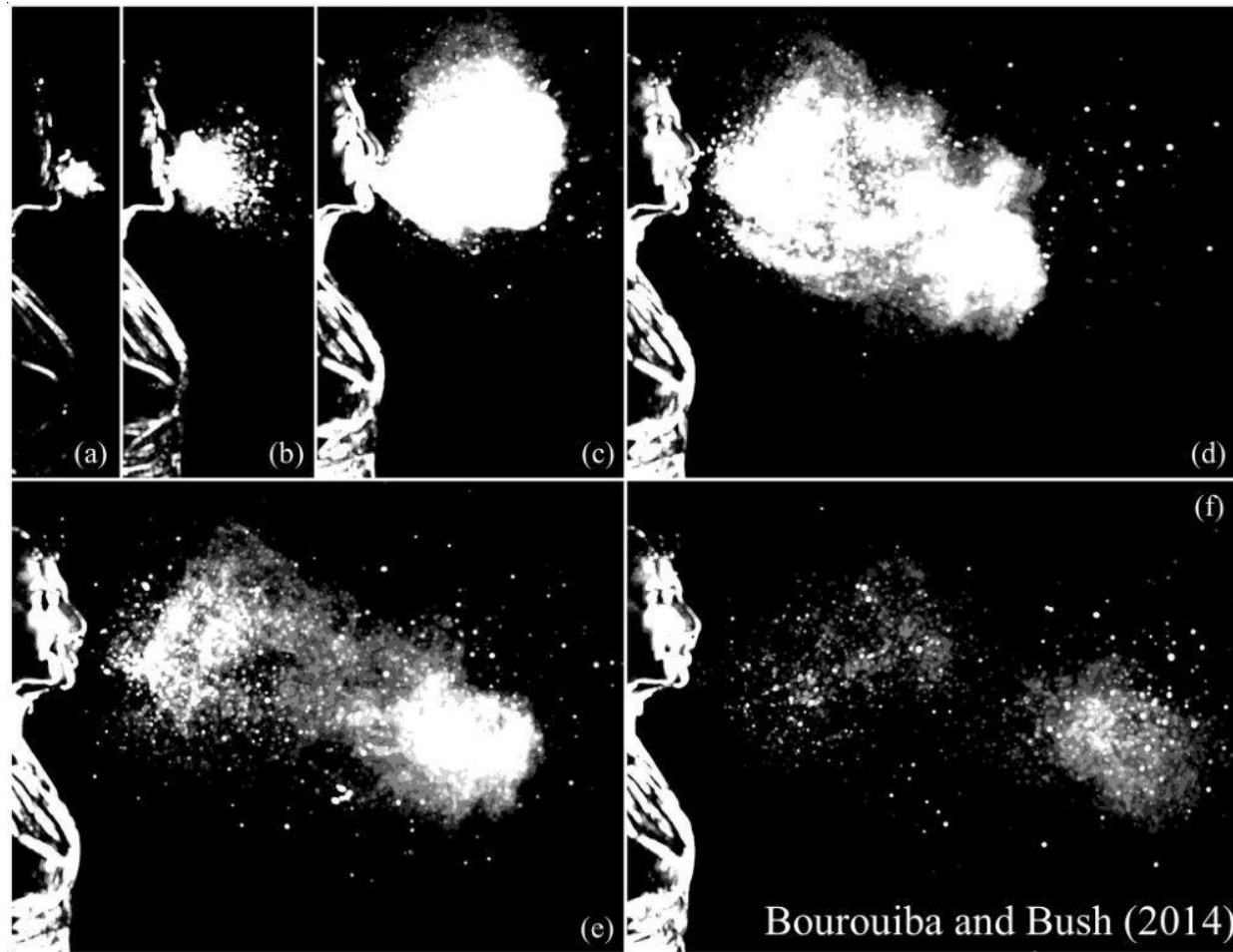
Source: CDC MMWR <https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e2.htm>

How COVID-19 is (likely) transmitted



Source: Xiao S, Li Y, Wong Tw, Hui DSC (2017) Role of fomites in SARS transmission during the largest hospital outbreak in Hong Kong. PLOS ONE 12(7): e0181558. <https://doi.org/10.1371/journal.pone.0181558>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0181558>

How COVID-19 is (likely) transmitted



What can we do about it?

Prevention:

- Take care of ourselves
 - Wash hands
 - Cover cough and Sneezes
 - Stay home when we are sick
 - Disinfect surfaces
- Cloth Masks
 - May help prevent you from spreading the virus to others
 - You may be contagious even without symptoms
 - Continue to stay 6 feet from others
 - Clinical masks should be reserved for healthcare workers
 - Not for children under 2 or those who can't remove their mask w/out assistance

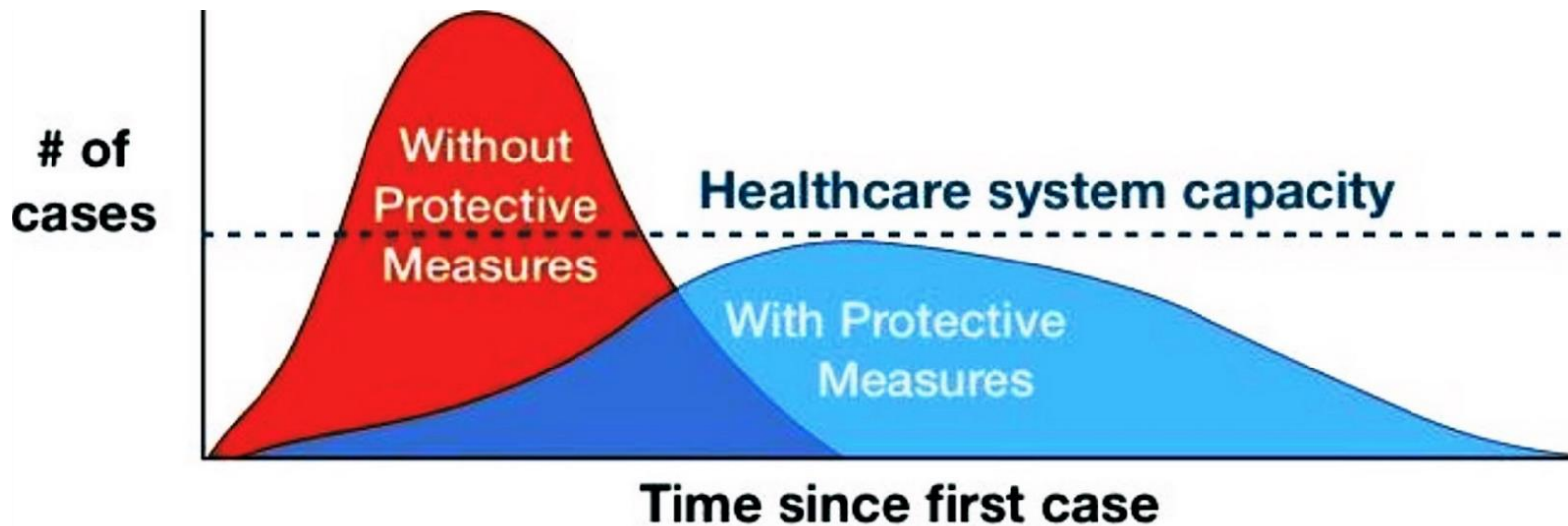
Treatment:

- No current vaccine
 - Many in development
 - Best case is availability in 12-18 months
- No specific treatments
 - Many in development
 - Will be some time before widely available

Social Distancing

Social Distancing

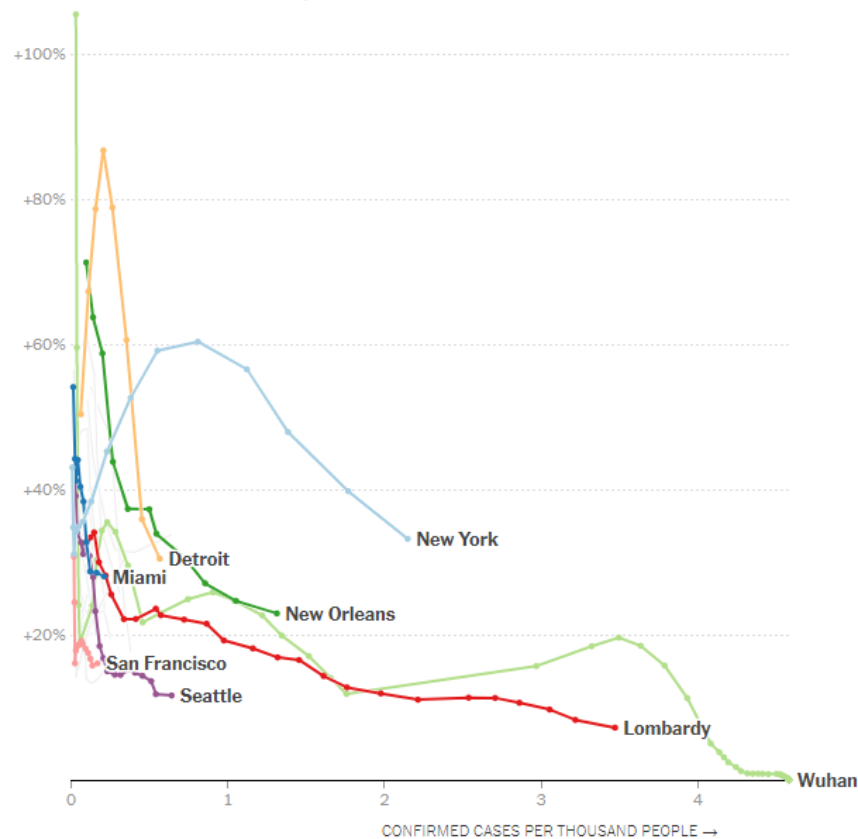
- Reduces chances for people to get each other sick
 - Cancelling events
 - Remote work
 - Cancelling or remote classes for school
 - Etc...



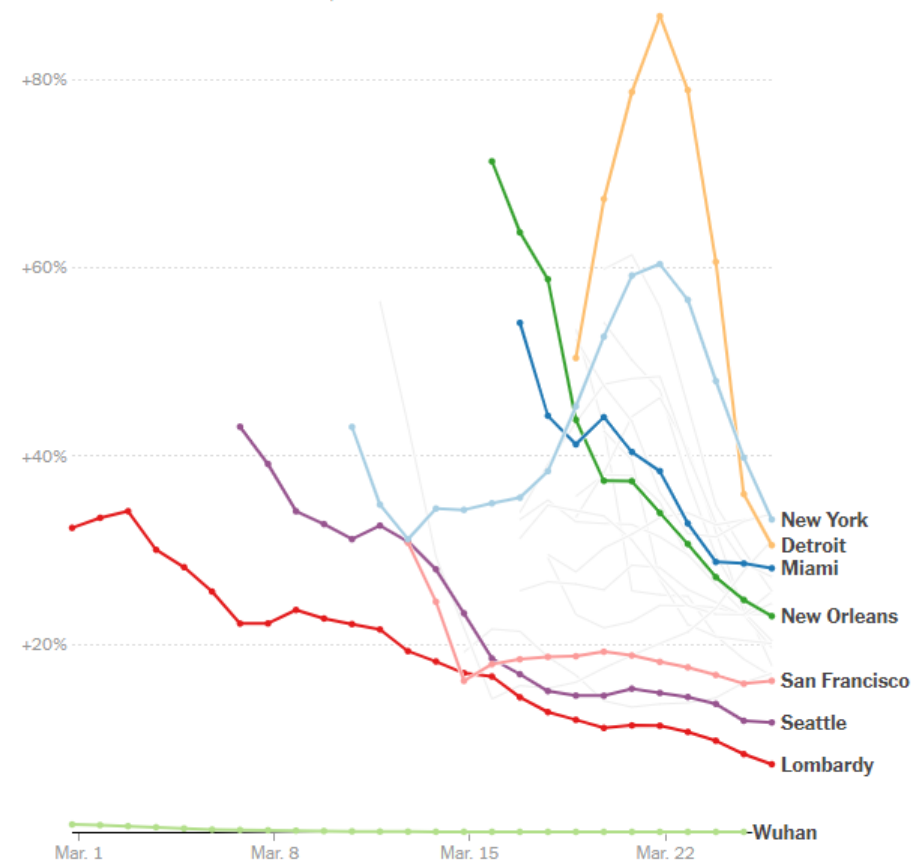
Adapted from CDC / The Economist

Social Distancing Takes Time to Show Up in the Data

AVERAGE DAILY CHANGE IN TOTAL CASES, OVER THE PREVIOUS 7 DAYS



AVERAGE DAILY CHANGE IN TOTAL CASES, OVER THE PREVIOUS 7 DAYS

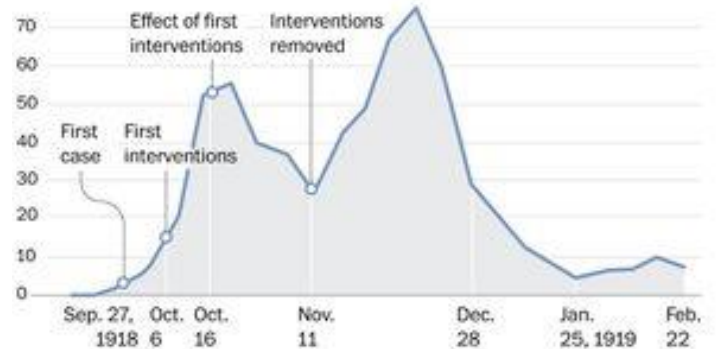


Source: NY Times <https://www.nytimes.com/interactive/2020/03/27/upshot/coronavirus-new-york-comparison.html>

Cautionary Tales

Denver's 'double-humped' curve in 1918

Data in excess of deaths* caused by the 1918 pandemic strain of influenza in Denver, per 100,000 population.



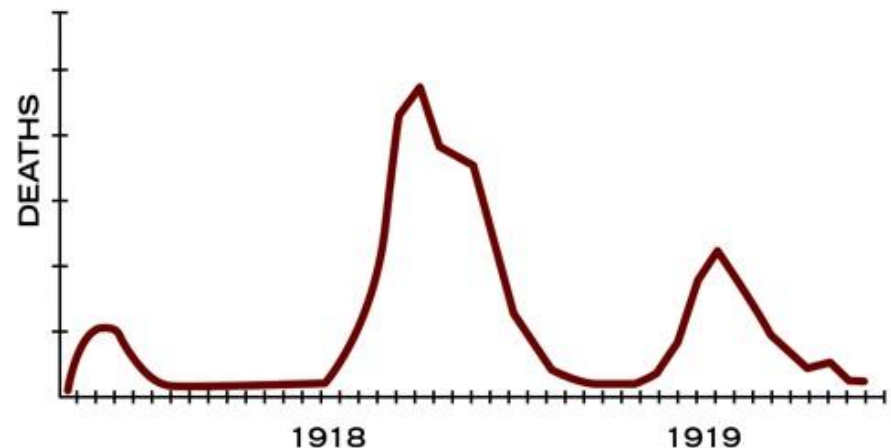
*Number of deaths caused by the flu in 1918 exceeding the typical death rate from seasonal influenza in previous years.

Source: Howard Markel

THE WASHINGTON POST

1918 Flu Pandemic – 3 waves

(source CDC: <https://www.cdc.gov/flu/pandemic-resources/1918-commemoration/three-waves.htm>)

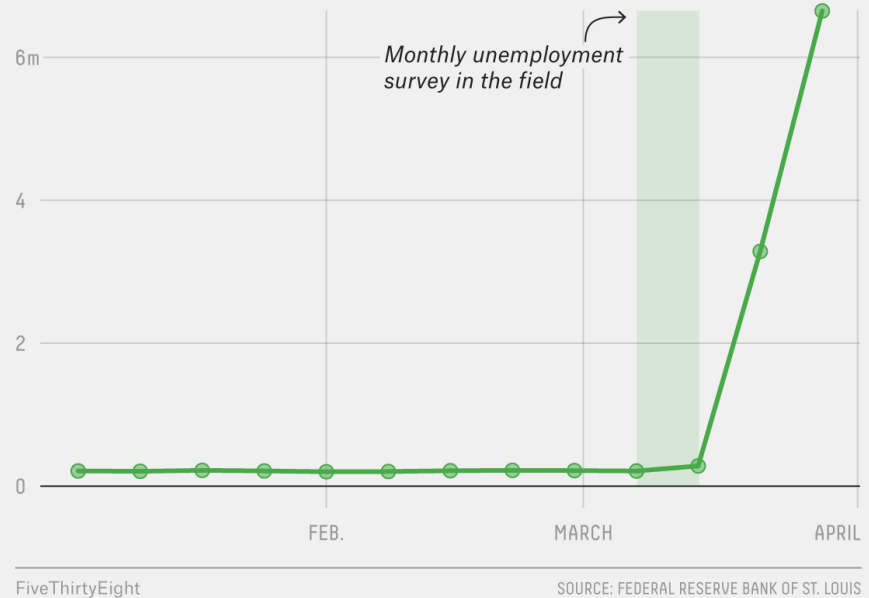


Social distancing has disadvantages

- Slowing down the virus also means slowing down the economy
 - More than 6 million declared unemployed, and there will be more
- Most small businesses cannot survive being closed for more than 5 days
- 40% of Americans have insufficient savings to cover an unexpected expense of \$ 400

This report doesn't capture the latest unemployment

Weekly seasonally adjusted initial unemployment insurance claims for 2020 so far

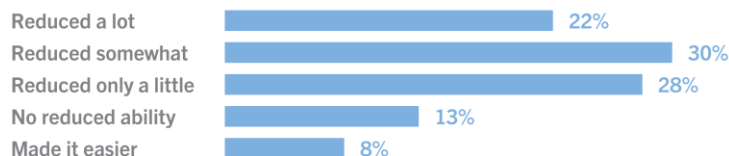


Fuente: US Federal Reserve. <https://www.federalreserve.gov/publications/2019-economic-well-being-of-us-households-in-2018-dealing-with-unexpected-expenses.htm>; Source: FEMA. https://www.fema.gov/media-library-data/1441212988001-1aa7fa978c5f999ed088dcaa815cb8cd/3a_BusinessInfographic-1.pdf ; FiveThirtyEight. <https://fivethirtyeight.com/features/this-jobs-report-was-bad-the-next-one-will-be-worse/>

Impacts in NYC

80% OF ALL NYC RESIDENTS REPORT A REDUCTION IN THEIR ABILITY TO ACCESS THE FOOD THEY NEED

To what extent has the coronavirus and its response reduced your household's ability to get the food you need?



CUNY Graduate School of Public Health and Health Policy Tracking Survey March 20-22, 2020, MM, n=1000, +/-3%

29% OF NYC HOUSEHOLDS REPORT AT LEAST ONE PERSON LOST THEIR JOB

The demographic sectors hit the hardest by job loss:

41%

of the **Latinx/Hispanic** community

34%

of those making <\$50,000 in **annual income**

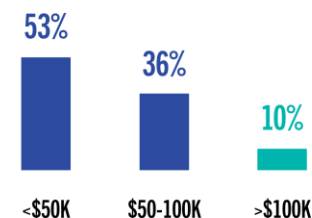
32%

of those who do not have a **college degree**

CUNY Graduate School of Public Health and Health Policy Tracking Survey March 20-22, 2020, MM, n=1000, +/-3%

57% OF HOUSEHOLDS RECEIVED SOME FORM OF COVID-19 RELIEF*

Nearly 90% went to lower and middle income households



* Reported benefits received by NYC residents since the beginning of the epidemic

- 42%** Getting a stimulus check
- 20%** Receiving unemployment benefits
- 14%** Other financial assistance (family/friends)
- 13%** Deferment of debt or mortgage
- 18%** Deferment of rent
- 13%** Received food from expanded school meal program
- 16%** Received food from other city, nonprofit, and religious organizations
- 16%** Began receiving SNAP food stamps

CUNY Graduate School of Public Health and Health Policy Tracking Survey April 24-26, 2020, MM, n=1000, +/-3%

Source: <https://sph.cuny.edu/research/covid-19-tracking-survey/week-7/>

Source: <https://sph.cuny.edu/research/covid-19-tracking-survey/week-2/>

Meeting the needs of Children

- Child-serving organizations still play an important role!
 - Helping parents
 - Connecting with kids
- Re-establish routines
 - Adhere to schedules
 - Home school activities
- Sustain social bonds
 - Virtual connections

COVID-19 DAILY SCHEDULE

© Jessica McHale Photography

Before 9:00am	Wake up	Eat breakfast, make your bed, get dressed, put PJ's in laundry
9:00-10:00	Morning walk	Family walk with the dog Yoga if it's raining
10:00-11:00	Academic time	NO ELECTRONICS Sudoku books, flash cards, study guide, Journal
11:00-12:00	Creative time	Legos, magnetiles, drawing, crafting, play music, cook or bake, etc
12:00	Lunch	
12:30PM	Chore time	A - wipe all kitchen table and chairs. B - wipe all door handles, light switches, and desk tops. C - Wipe both bathrooms - sinks and toilets
1:00-2:30	Quiet time	Reading, puzzles, nap
2:30-4:00	Academic time	ELECTRONICS OK Ipad games, Prodigy, Educational show
4:00-5:00	Afternoon fresh air	Bikes, Walk the dog, play outside
5:00-6:00	Dinner	
6:00-8:00	Free TV time	Kid showers x3
8:00	Bedtime	All kids
9:00PM	Bedtime	All kids who follow the daily schedule & don't fight

Resources from the Resilient Children / Resilient Communities Initiative

<https://RCRCToolbox.org>

- Children and the Coronavirus: A Guide for Families and Providers
- Continuity of Operations (COOP)
 - Plan template
 - COOP presentation template
 - COOP Facilitator's Guide
 - Practical Guide
 - Essential Functions Worksheet
 - Essential Function Table
 - COOP in the time of COVID-19 webinar with subtitles in Spanish
- More to come!

Key Conclusions

- There is still a lot of uncertainty about COVID-19 and its possible impacts
- The most vulnerable at greatest risk of negative impacts from mitigation and containment efforts
- Maintaining social ties and professional networks is critical to remain adaptive to uncertainty

Questions?

- Thank you!