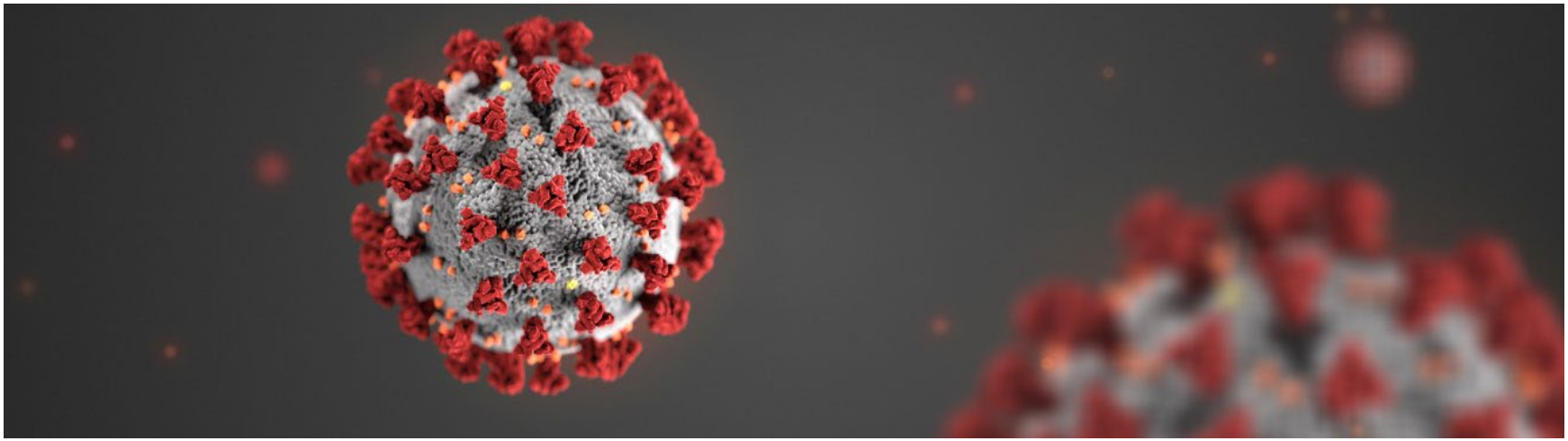
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COVID-19
What it is, what we know, and what we don't know

April 8, 2020

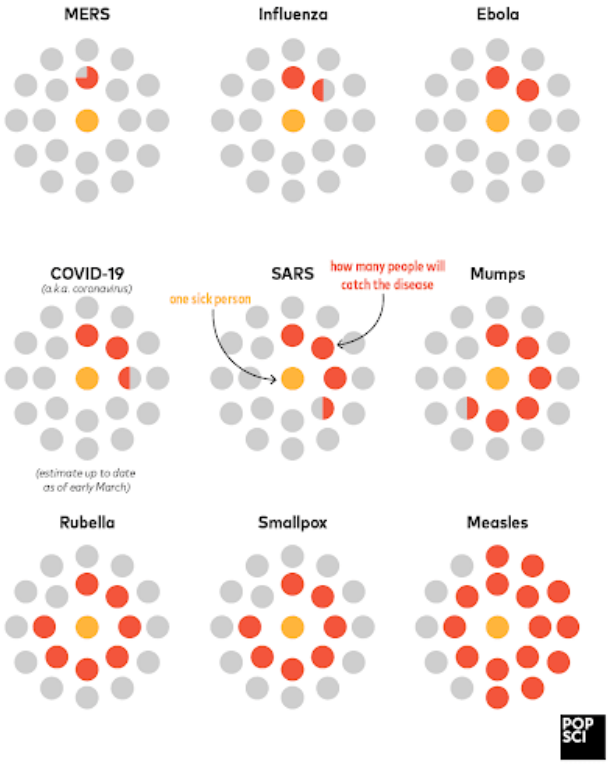


What makes some pandemics worse than others ?

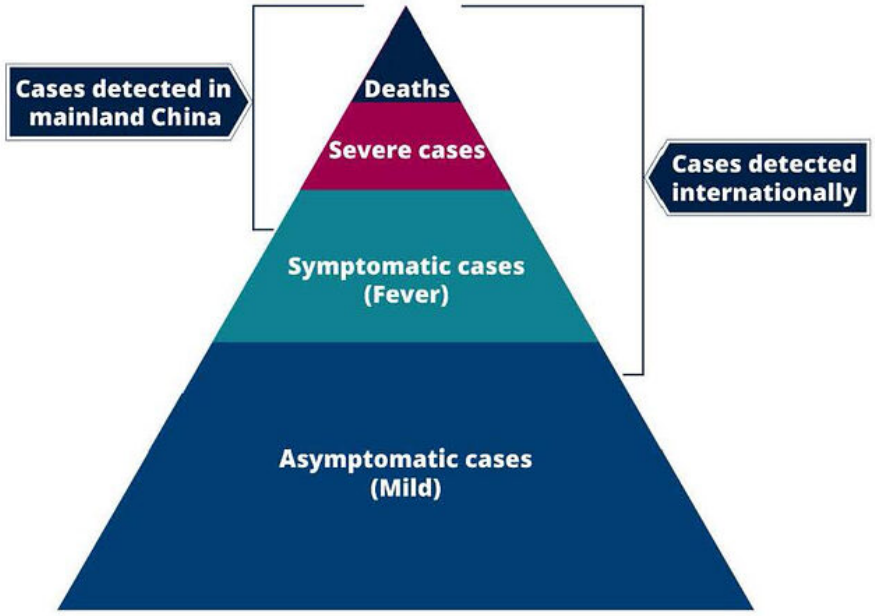
How easily it spreads*

How deadly it is*

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



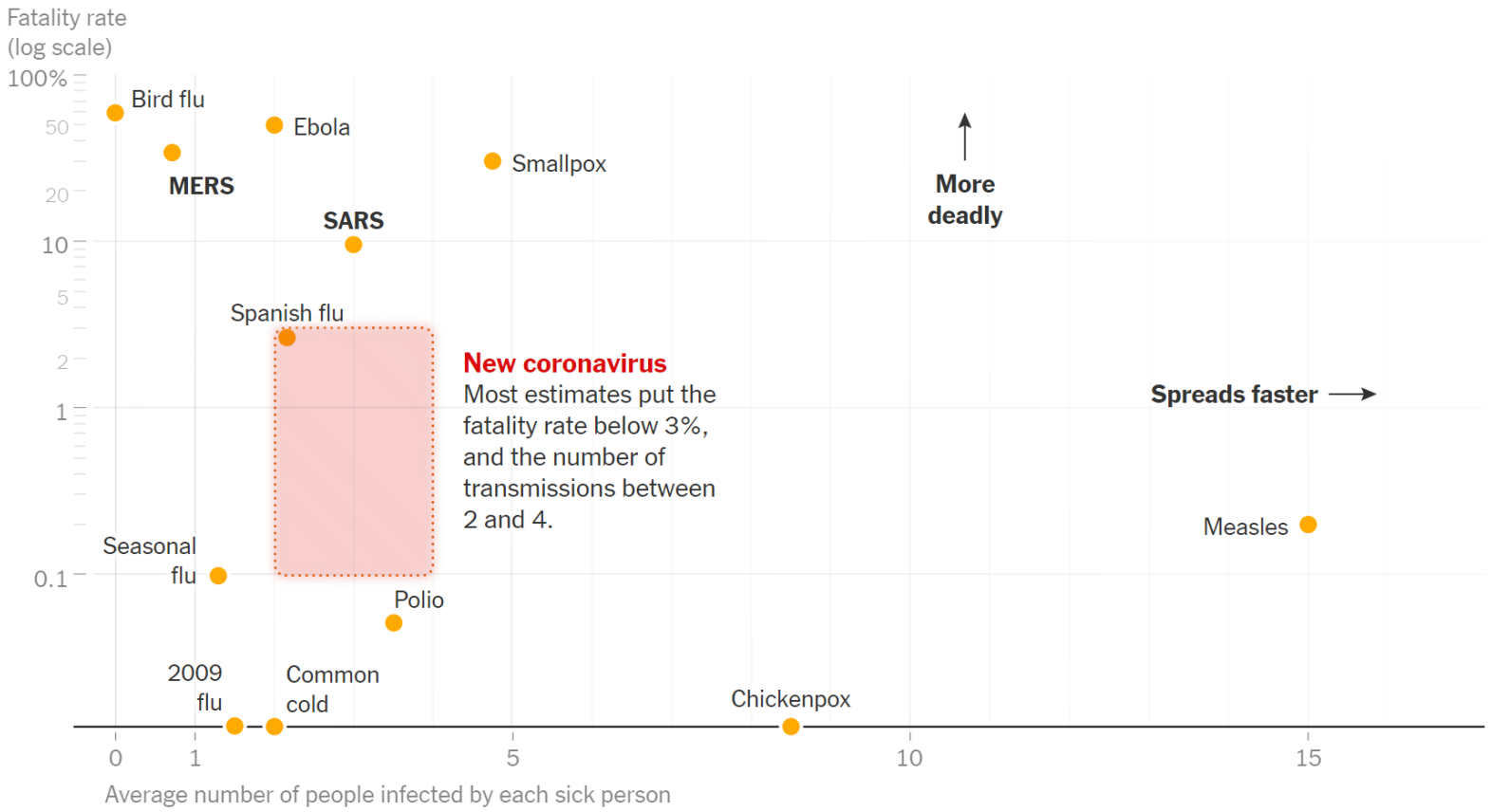
Source: Popular Science
https://www.popsci.com/story/health/how-diseases-spread/



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



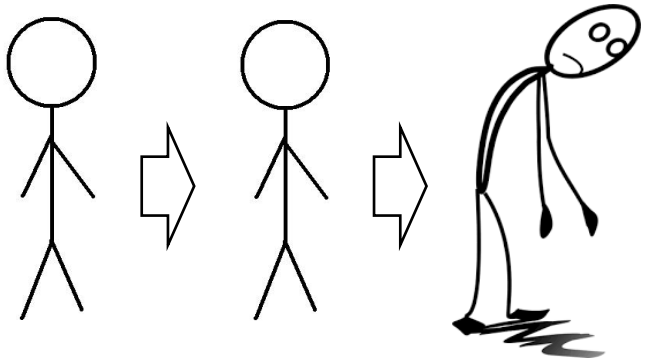
Note: Average case-fatality rates and transmission numbers are shown. Estimates of case-fatality rates can vary, and numbers for the new coronavirus are preliminary estimates.

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

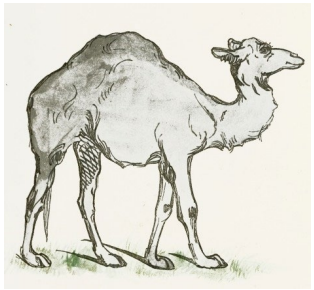
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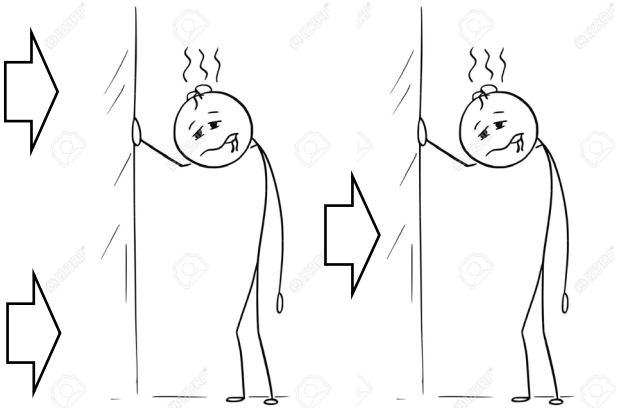
What is a Coronavirus?

- Coronaviruses are common viruses, and regularly effect humans
  - Often mild illness
- Some infect animals, and can cross species to create new variants that infect people
  - MERS-CoV
  - SARS-CoV
  - SARS-CoV-2 (COVID-19)









Source: CDC https://www.cdc.gov/coronavirus/types.html

Where did COVID-19 Come from (for real)?

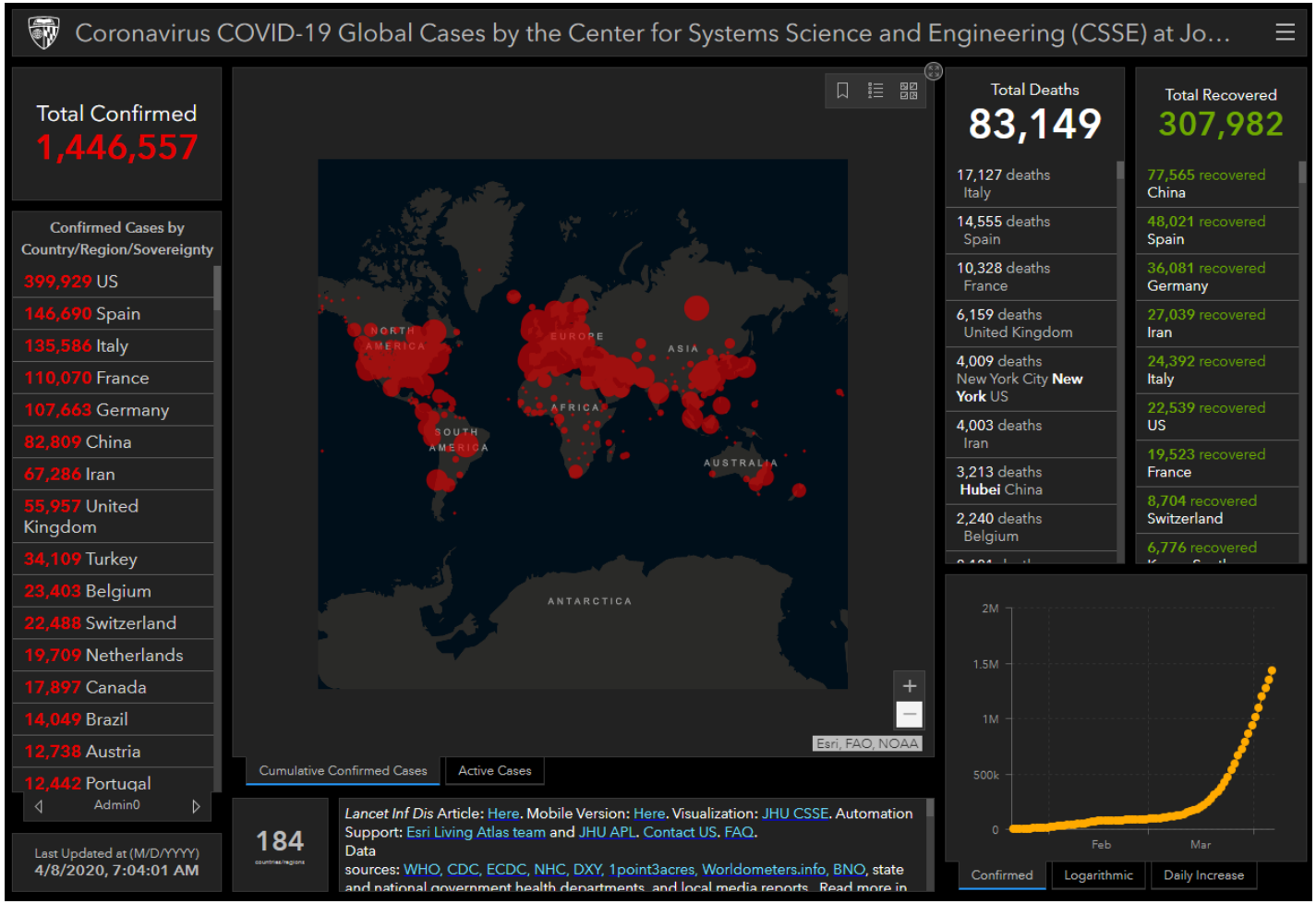
- The first cases had contact with a seafood and live animal market in Wuhan China
  - Likely first exposures from animals to people
- Later cases were not linked to the market
  - Person-to-person spread likely began





Source: CDC https://www.cdc.gov/coronavirus/2019-nCoV/summary.html#anchor_1580079137454

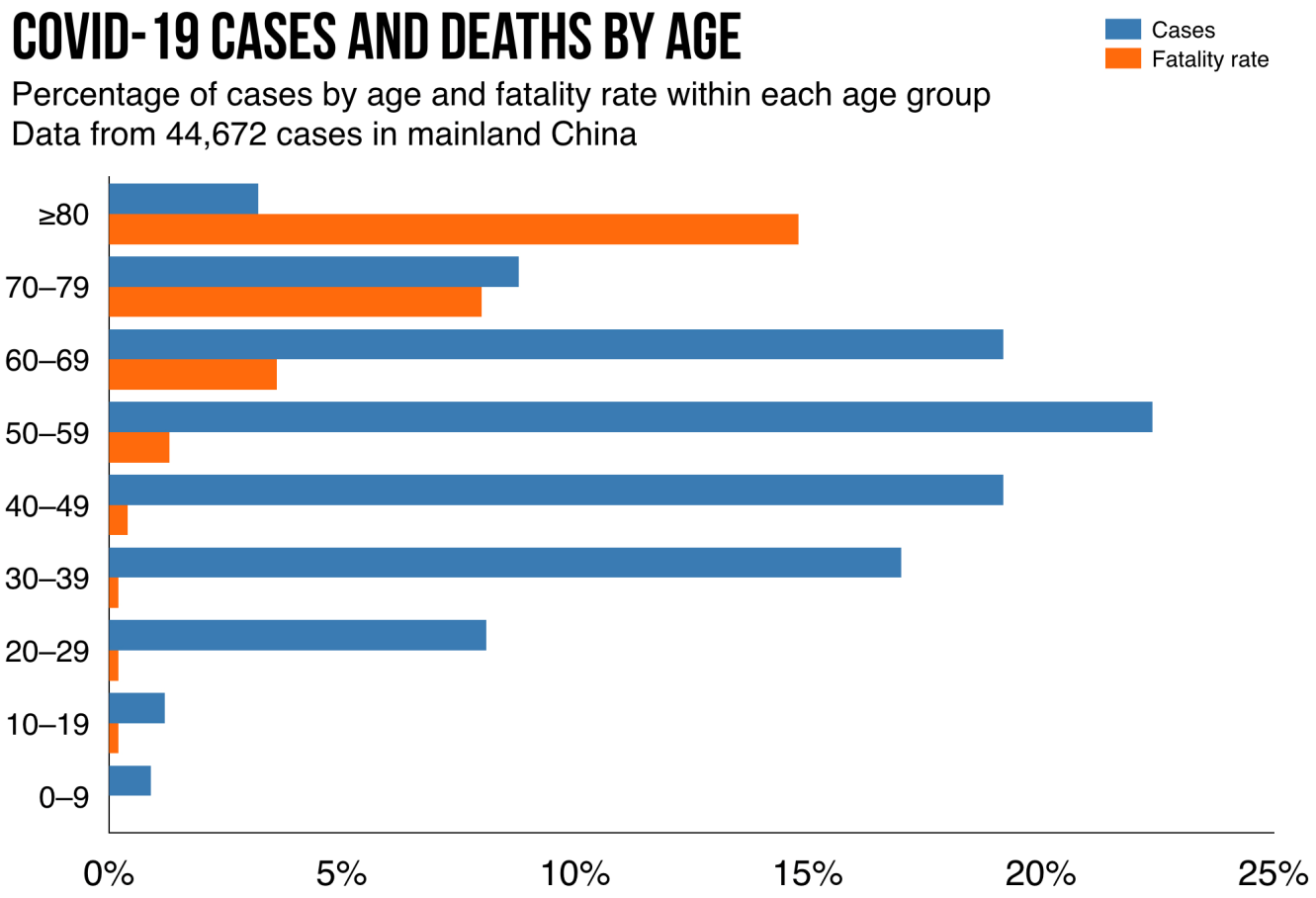
Then it spreads…



Source: Johns Hopkins CSSE
https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6

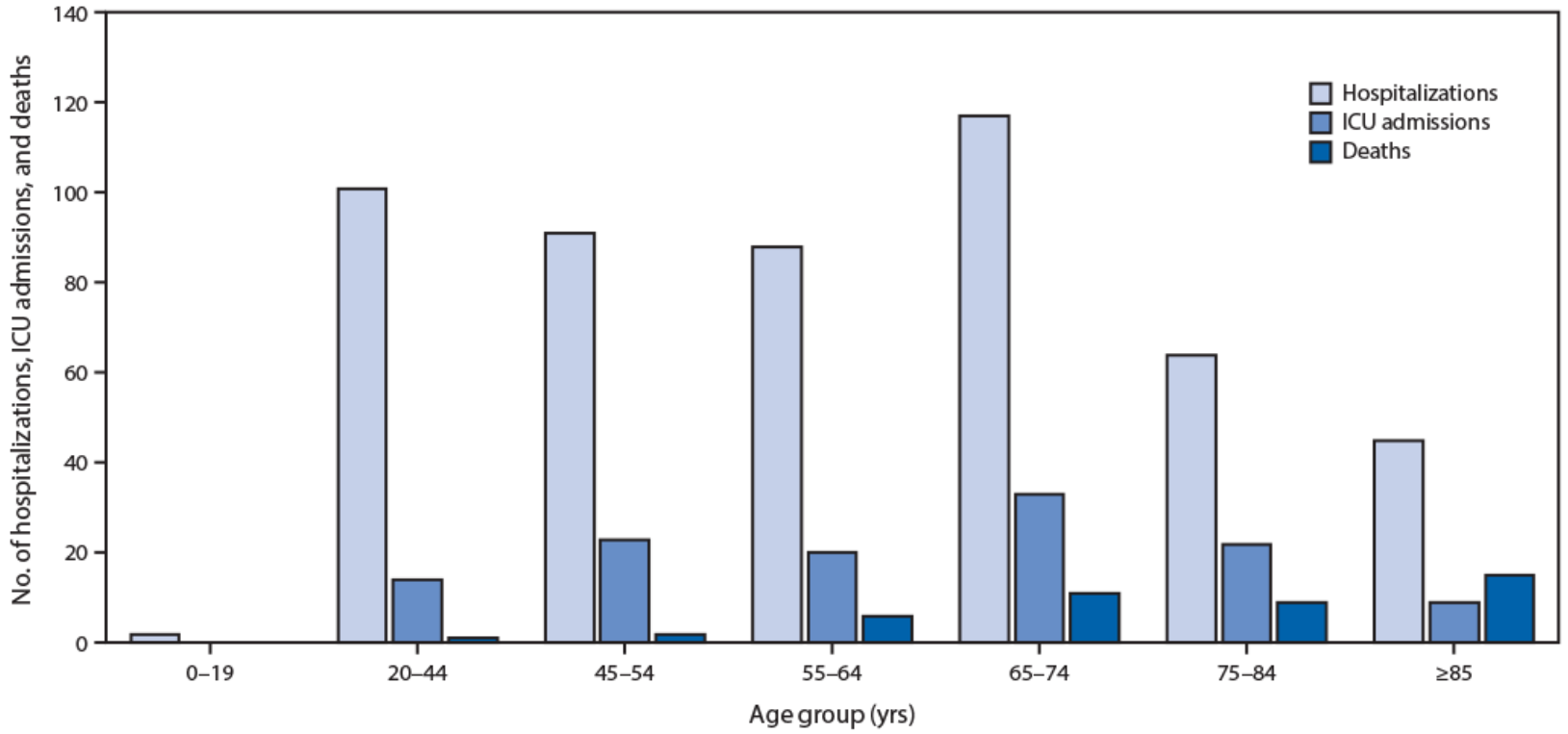
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Who is (currently) getting sicker than others?



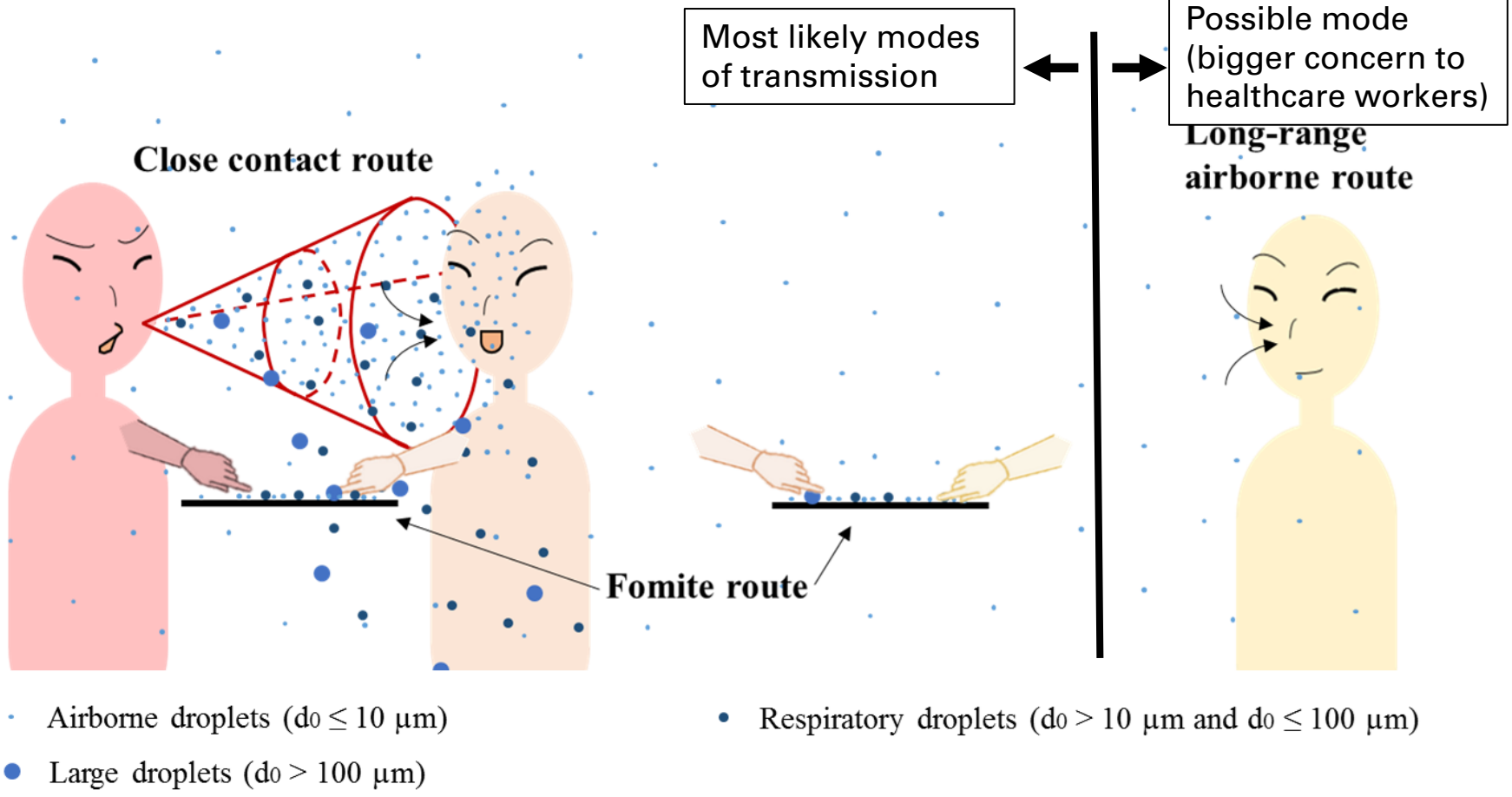
Source: China CDC, reported by ars technica
https://arstechnica.com/science/2020/03/dont-panic-the-comprehensive-ars-technica-guide-to-the-coronavirus/

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



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

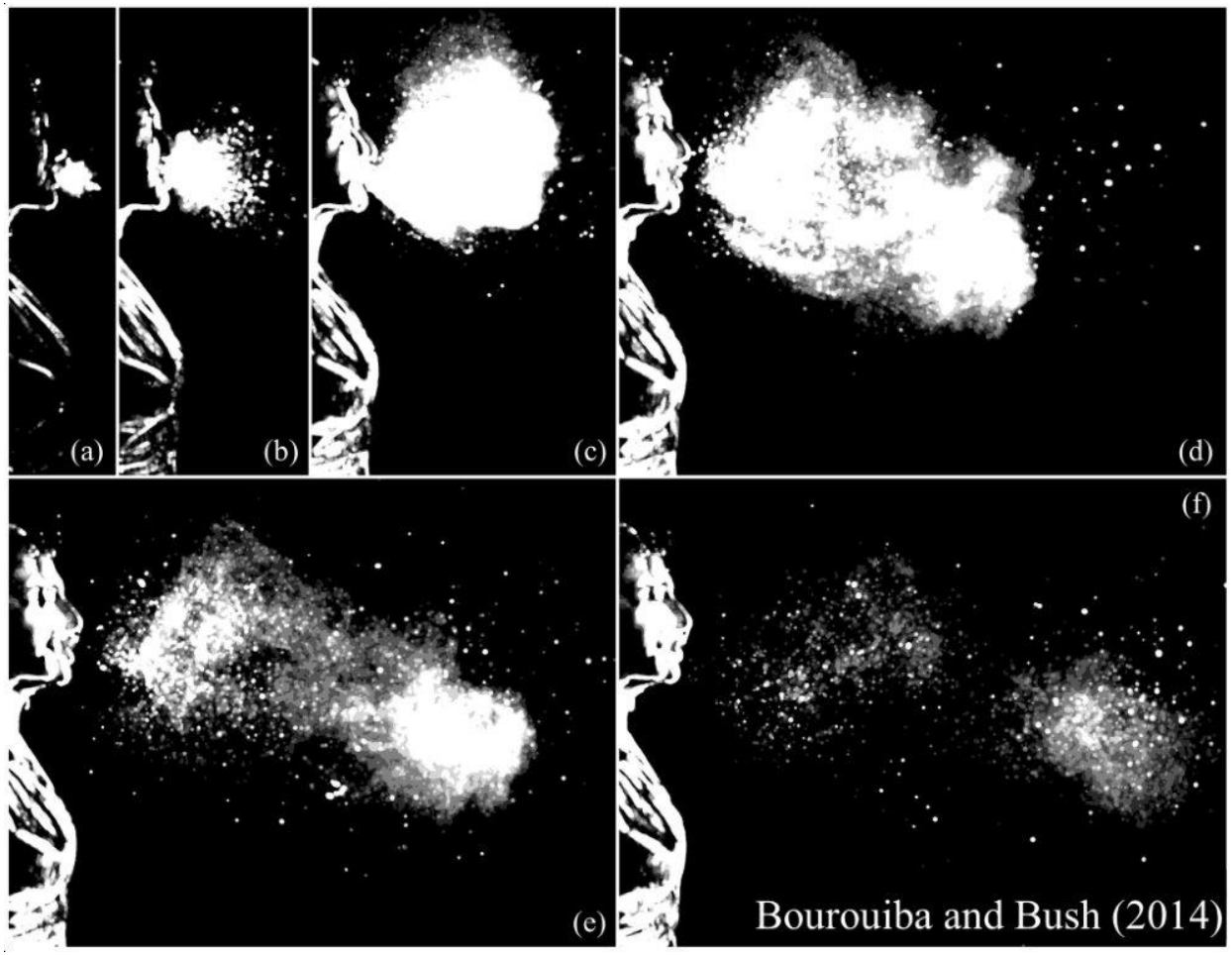
How COVID-19 is (likely) transmitted



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

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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

Treatment:

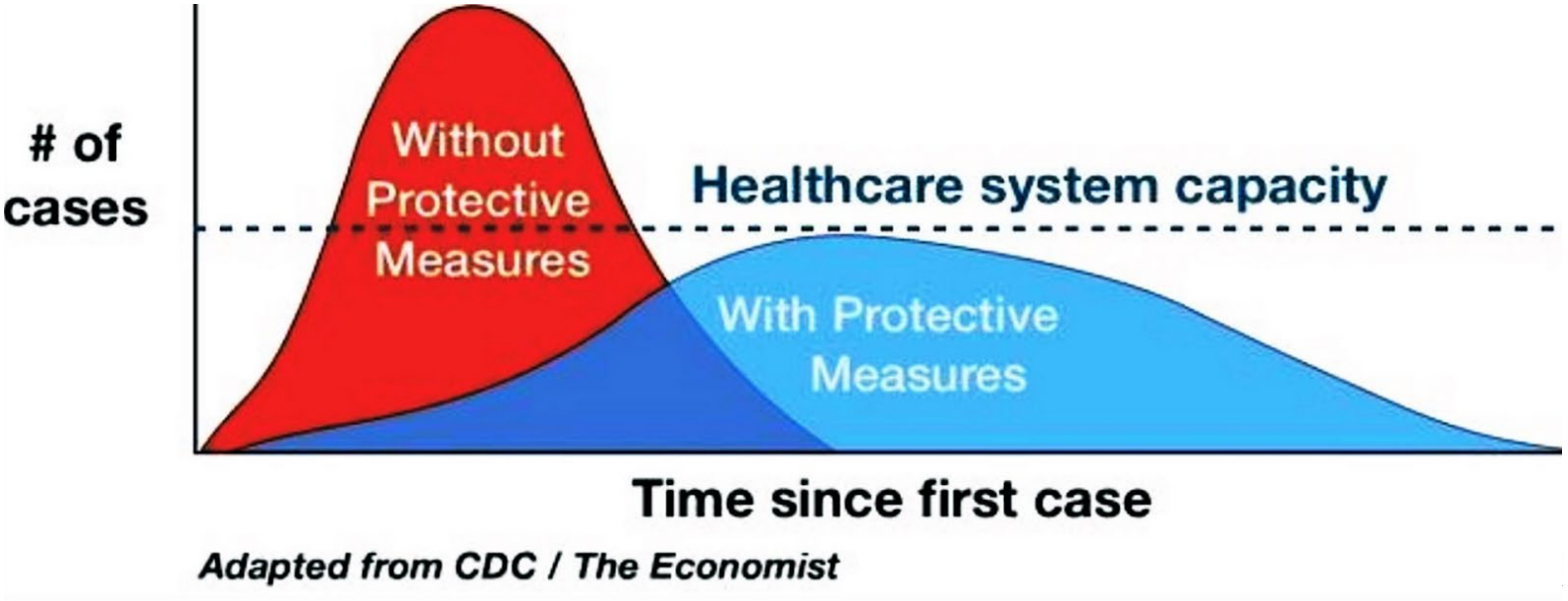
- No current vaccine
  - Many in development
  - Best case is availability in 12-18 months
- No specific treatments
  - Many in development
  - Will be some time before widely available

Source: CDC https://www.cdc.gov/coronavirus/2019-ncov/about/prevention-treatment.html

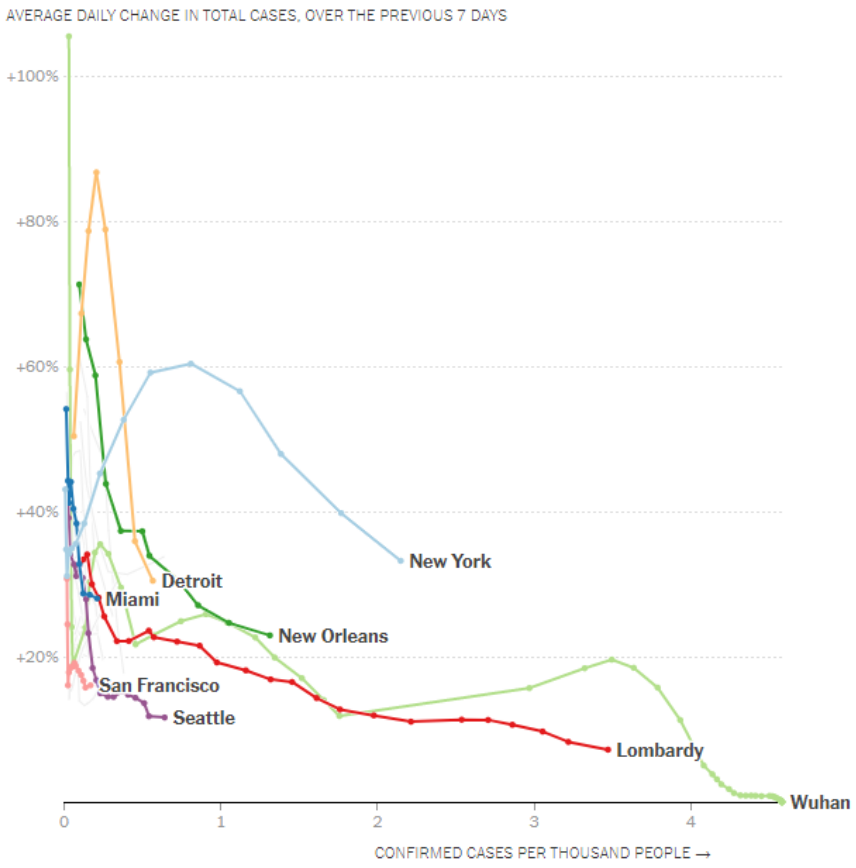
Social Distancing

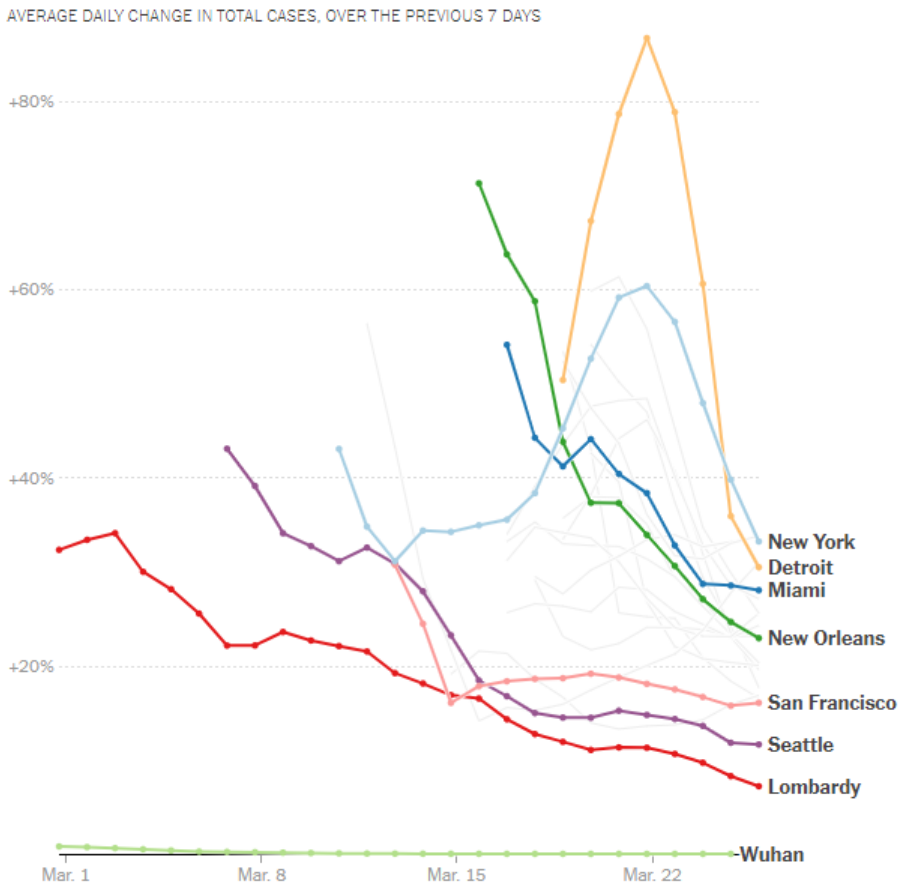
Social Distancing

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



Social Distancing Takes Time to Show Up in the Data





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

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Managing COVID-19 at Home

General

Stay home

- Monitor symptom
- Get rest and stay hydrated
- Cover cough and sneezes
- Wash hands often

Medical

- Notify medical personnel you may have COVID-19 (appointments, emergency services, etc)

In the home

- Disinfect all surfaces
- Stay away from other people (e.g. have a "sick room")
- Avoid sharing items

When to Seek Medical Attention

If you develop **emergency warning signs** for COVID-19 get **medical attention immediately**. Emergency warning signs include*:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

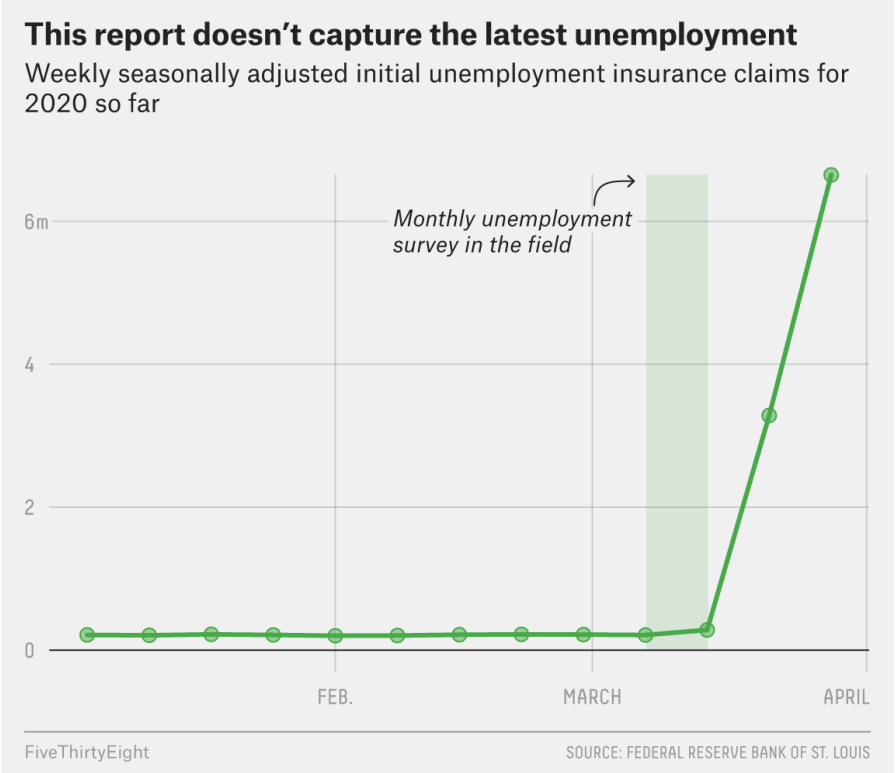
*This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.

Source:CDC https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/caring-for-yourself-at-home.html

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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



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/

Federal Stimulus

Payments to individuals

- To individuals for up to $1,200, gradually for income over $75,000
- To married couples up to $2,400, gradually eliminating income of more than $150,000
- Additional $500 for each child

Unemployment benefits

- Extension of up to 13 weeks
- Additional unemployment benefits
- Open to workers in the "gig economy" (independent workers, independent contractors, etc.)

Other benefits

- Small Business Loans
- Expansion of food assistance programs
- Tolerance for student loans and other debts
- Direct encouragement to state and territorial governments
- Health system costs due to COVID-19

Fuente: Senator Coons Office https://www.coons.senate.gov/services/coronavirus-faq

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



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
- Disruptions are already being experienced, with the most vulnerable at greatest risk of negative impacts from mitigation and containment efforts
- Maintaining community livelihoods and safety nets will be critical to helping the most vulnerable

Questions?

- Thank you!