

Coronavirus!

~~With 31 deaths in the U.S. as of March 11, a 1% death rate, and up to 4 weeks between infection and death, that means that as of Feb 12 there were 3100 coronavirus cases in the United States.~~

~~With 87 deaths in the U.S. as of Mar 16, a 1% death rate, and up to 4 weeks between infection and death, that means that as of Feb 17 there were 8700 coronavirus cases in the United States~~

~~If it is doubling every seven days, then now about 150,000 people have and in the next week about 150,000 more people in the U.S. will catch coronavirus—which means 1/2200, currently 3500 of the 7.6 million inhabitants of San Francisco Bay. Touch a hard surface that any of those 3500 has touched in the last 48 hours, and the virus has a chance to jump to you...~~

~~These numbers could be five times too big. These numbers are probably not five times too small unless the thing is a lot less deadly, and there are a lot of asymptomatic cases...~~

- What is wrong with this analysis?

MOAR Coronavirus!

As of March 16: Things are not moving in the right direction:

- What is the R_0 ?
- How can the R_0 be changed?
- How will the R_0 change?
- What is the asymptote share of the population?
- What is the mortality rate?

Coronavirus Cases:

179,836

[view by country](#)

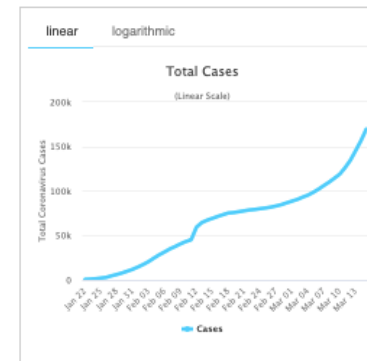
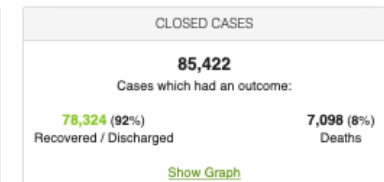
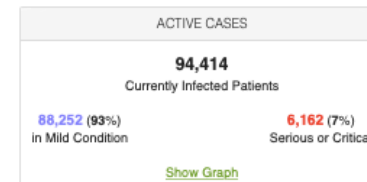
Deaths:

7,098

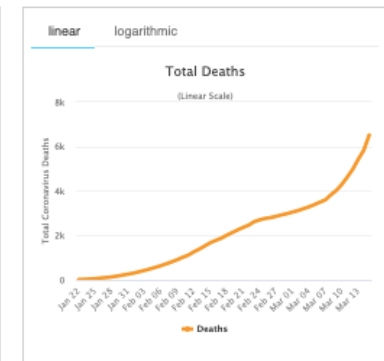
Recovered:

78,324

Country, Other	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical	Tot Cases/ 1M pop
China	80,880	+36	3,213	+14	67,819	9,848	3,226	56.2
Italy	27,980	+3,233	2,158	+349	2,749	23,073	1,851	462.8
Iran	14,991	+1,053	853	+129	4,590	9,548		178.5
Spain	9,428	+1,440	335	+41	530	8,563	272	201.6
S. Korea	8,236	+74	75		1,137	7,024	59	160.6
Germany	7,241	+1,428	15	+2	65	7,161	2	86.4
France	5,423		127		12	5,284	400	83.1
USA	4,186	+506	73	+5	73	4,040	12	12.6
Switzerland	2,353	+136	19	+5	4	2,330		271.9
UK	1,543	+152	55	+20	52	1,436	20	22.7
Netherlands	1,413	+278	24	+4	2	1,387	45	82.5
Norway	1,323	+67	3		1	1,319	27	244.0



[More Case Statistics](#)



[More Death Statistics](#)

MOAR Coronavirus!

As of March 10: Things are not moving in the right direction:

- What is the R_0 ?
- How can the R_0 be changed?
- How will the R_0 change?
- What is the asymptote share of the population?
- What is the mortality rate?

Coronavirus Cases:

125,599

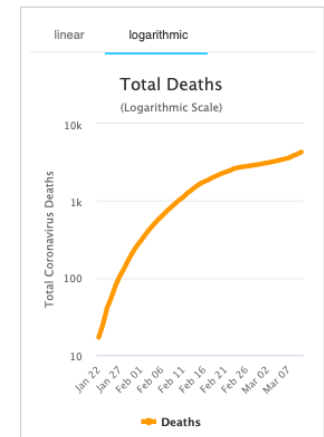
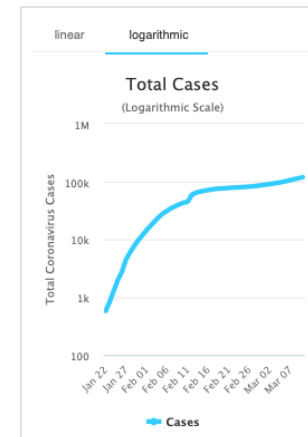
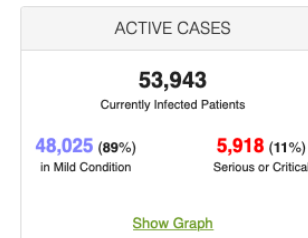
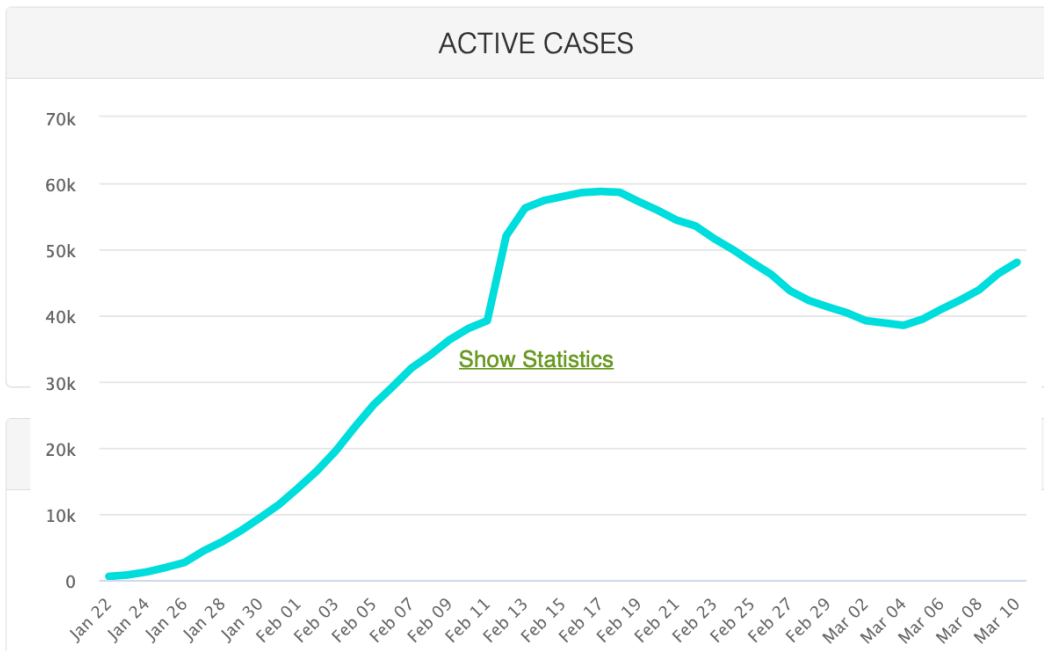
[view by country](#)

Deaths:

4,605

Recovered:

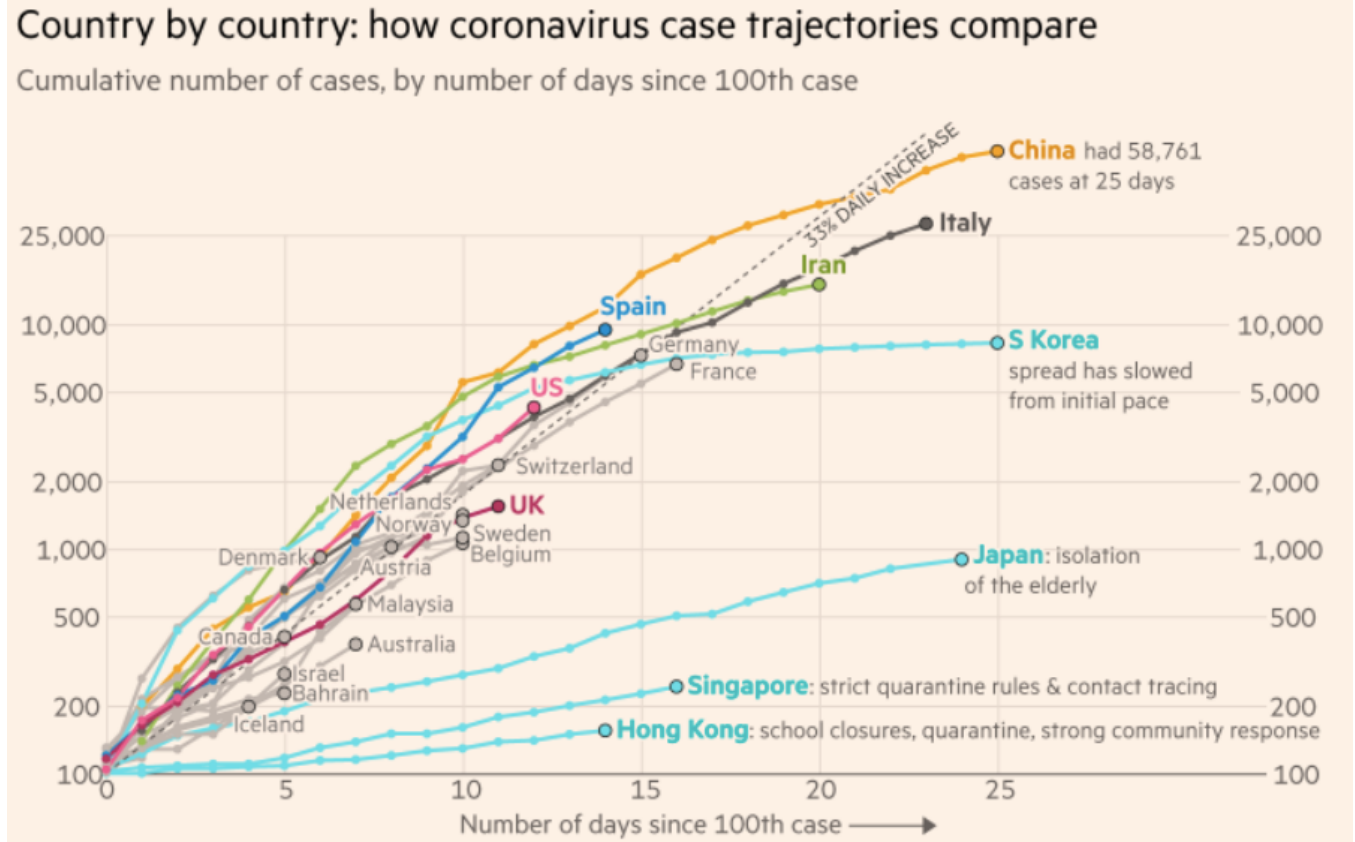
67,051



MOAR Coronavirus!

What I am watching:

- **Max Roser & Hannah Ritchie:** *Coronavirus Disease (COVID-19)* <<https://ourworldindata.org/coronavirus>>...
- **Worldometer:** *Coronavirus Update (Live)* <<https://www.worldometers.info/coronavirus/>>: '125,599 Cases and 4,605 Deaths from COVID-19 Virus Outbreak...
- **FT Coronavirus Tracker** <<https://www.ft.com/content/a26fbf7e-48f8-11ea-aeb3-955839e06441>>
- <<https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>>



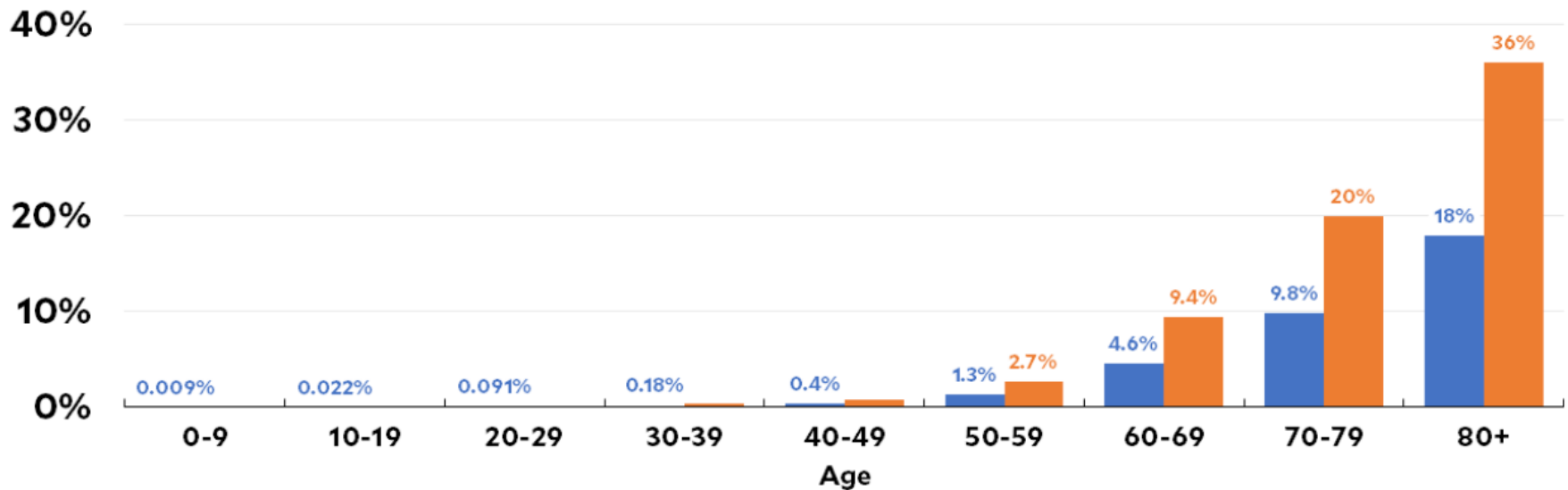
MOAR Coronavirus!

It's a Thing for Geezers!

- Mortality for the Youngs very low...
- It's the flu for them...

Death Rate From Coronavirus

■ = All Infections, ■ = Only Symptomatic Infections



Source: Riou et al.

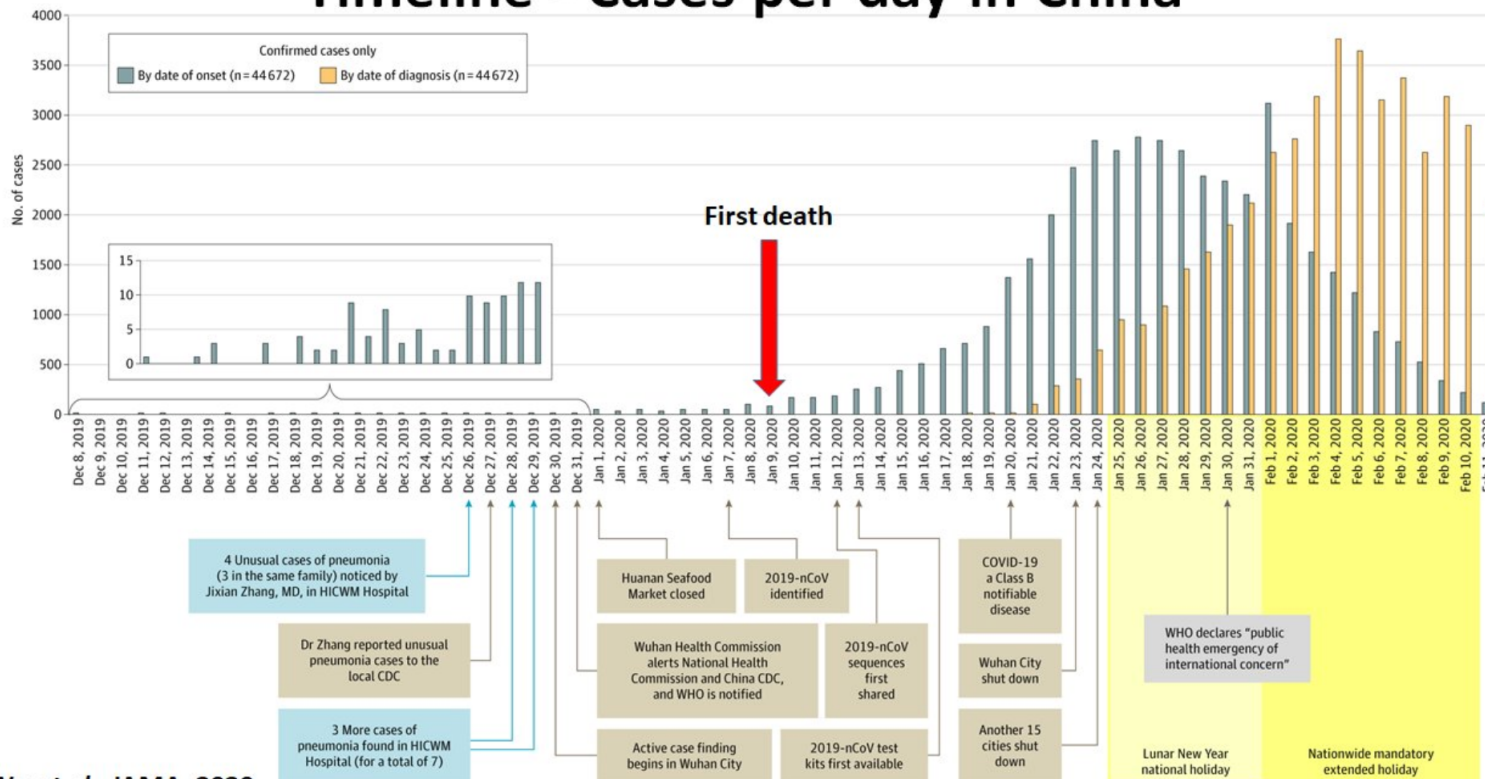
Mother Jones

MOAR Coronavirus! II

China Beat It!

- Shut down Wuhan when 200 cases per day
- That seems to have been a good decision

Timeline - Cases per day in China



MOAR Coronavirus! III

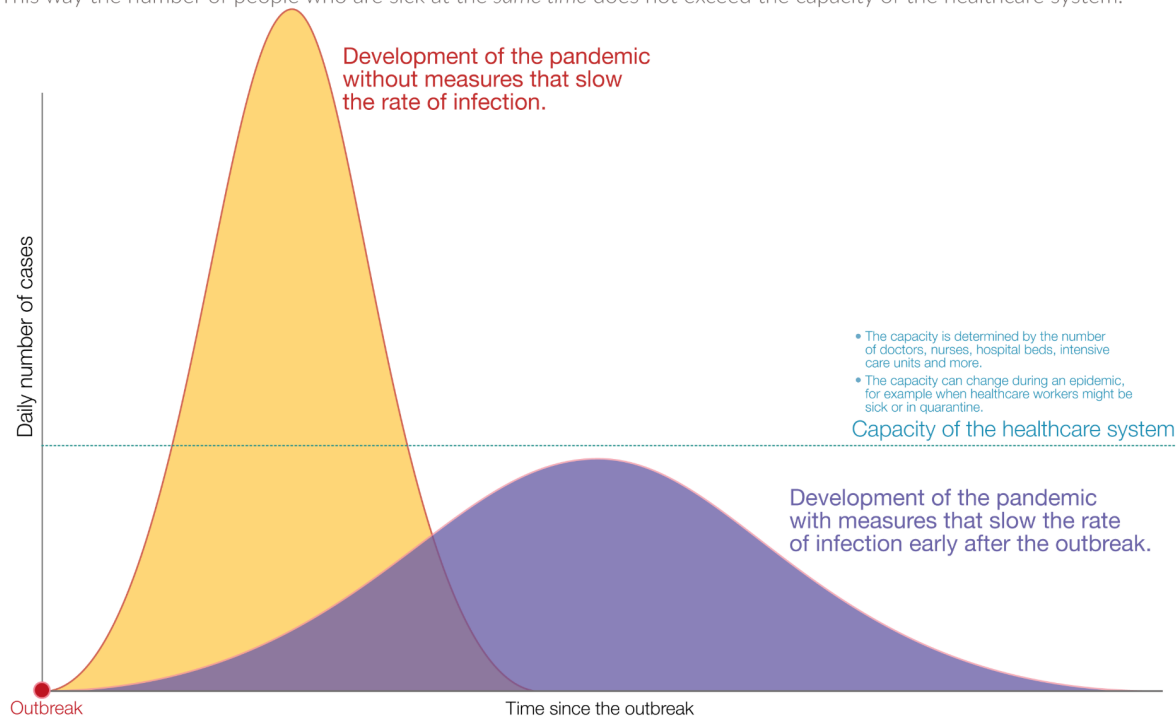
When Is It Appropriate to Move on This?

- Immediate social distancing...
- Self-isolate if you have a cough and a fever...
- Hope that warmer temperatures will do to this what they did to SARS...
- Otherwise, when do you want to start spreading out transmission. It seems that early is as good as later...

In the outbreak of an epidemic *early* counter measures are important

Our World
in Data

Their intention is to 'flatten the curve': to lower the rate of infection to spread out the epidemic.
This way the number of people who are sick at the *same time* does not exceed the capacity of the healthcare system.



Catch Our Breath...

- Ask a couple of questions?
- Make a couple of comments?
- Any more readings to recommend?



Notes

