

Santa Clara County's Remarkably Low COVID-19 Death Numbers

By John F. McGowan, Ph.D.

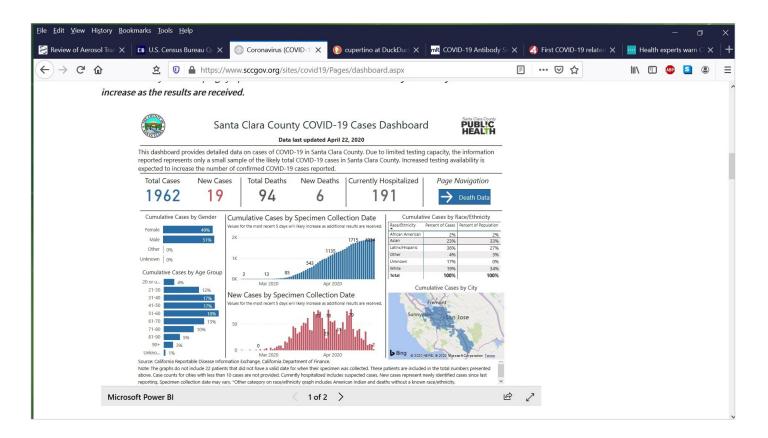
Date: April 23, 2020

Santa Clara County's Remarkably Low COVID-19 Numbers

Despite numerous seeming missteps in the response to the coronavirus COVID-19 and *close ties to China*, Santa Clara County, California reports extremely low numbers of cases and deaths...so

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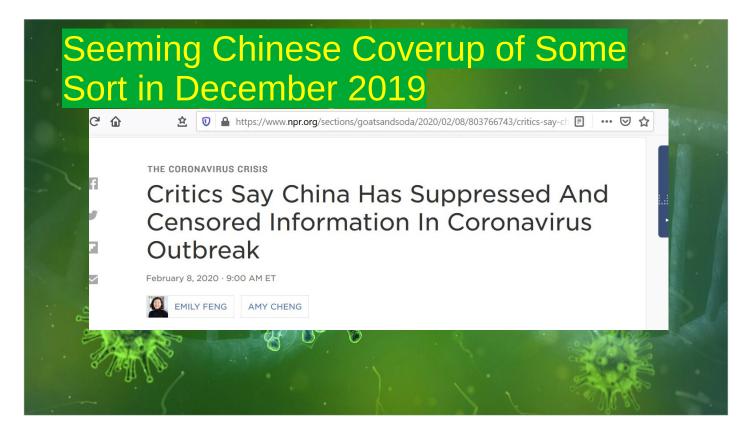
far.



https://www.sccgov.org/sites/covid19/Pages/dashboard .aspx

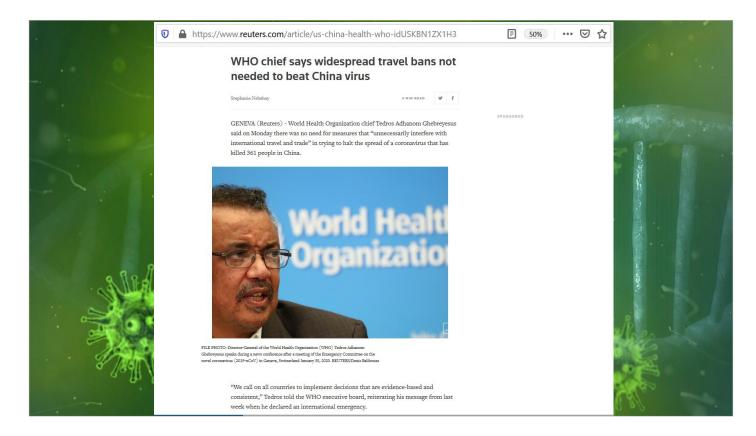
Santa Clara County COVID-19 Cases Dashboard

Only ninety-four (94) deaths from COVID-19 as of April 22, 2020



China seemingly engaged in a coverup of the coronavirus outbreak in December, denying any problem, and punishing those who reported a problem. Presumably they allowed the outbreak to proceed unimpeded for several weeks.

https://www.npr.org/sections/goatsandsoda/ 2020/02/08/803766743/critics-say-china-hassuppressed-and-censored-information-incoronavirus-outbrea



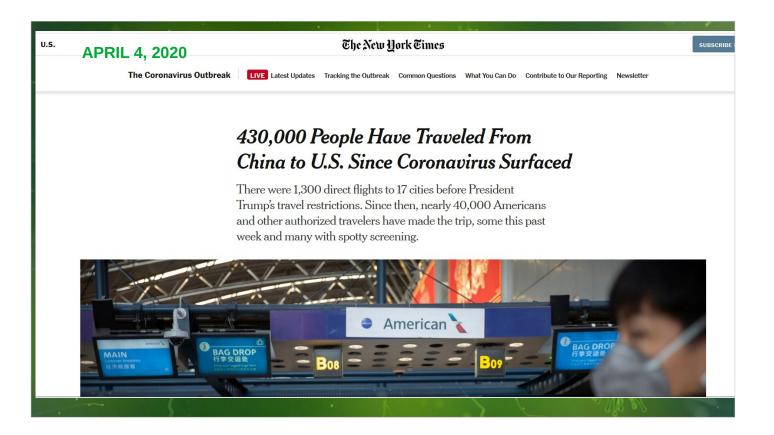
WHO Chief says widespread travel bans not needed to beat China virus

https://www.reuters.com/article/us-china-health-whoidUSKBN1ZX1H3



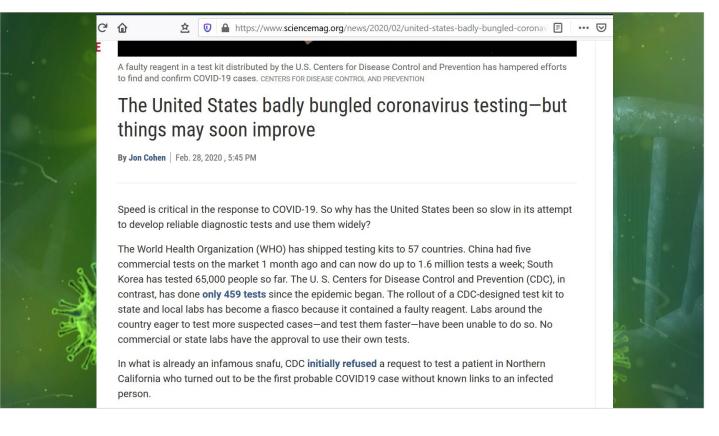
Health experts warn China travel ban will hinder coronavirus response

https://www.statnews.com/2020/01/31/as-far-rightcalls-for-china-travel-ban-health-experts-warncoronavirus-response-would-suffer/



- 430,000 people have traveled from China to the United States since the coronavirus surfaced. In Santa Clara County, California we have extensive ties to China with many residents/workers from China. Many many products are manufactured at factories in China, including Wuhan.
- Remarkably, so far, supposedly only 94 coronavirus deaths in the county with almost two million residents (April 22, 2020). *Too good to be true?*

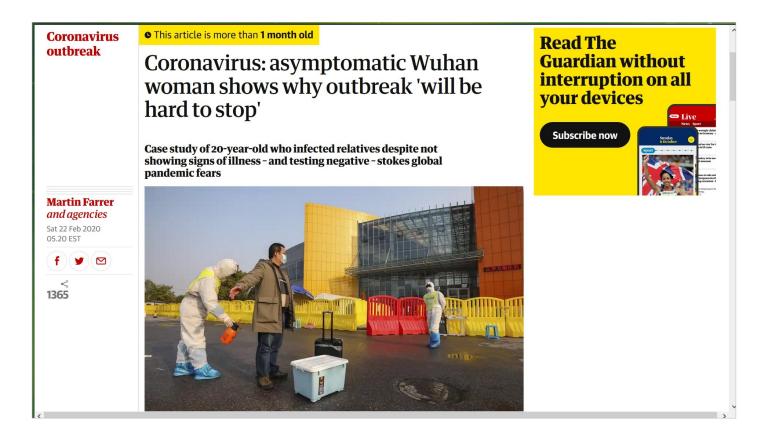
https://www.nytimes.com/2020/04/04/us/ coronavirus-china-travel-restrictions.html



The United States CDC badly bungled the coronavirus testing, turning down a working coronavirus test from Germany recommended by the WHO. This is test used in South Korea and Germany for example.

- CDC opted to make its own test taking several weeks. The test failed.
- Thus US has had limited testing compared to other countries like South Korea and Germany that seem to have contained the pandemic, and notably have tested many more asymptomatic people. They seem to see a much lower mortality rate – no surprise.

https://www.sciencemag.org/news/2020/02/unitedstates-badly-bungled-coronavirus-testing-thingsmay-soon-improve



Study estimates 86 percent of cases in China undetected.

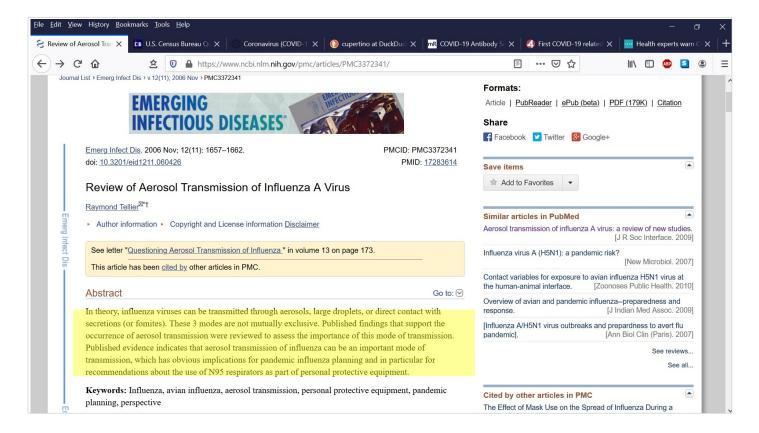
https://science.sciencemag.org/content/early/2020/03/ 24/science.abb3221

Research Article

Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2)

Ruiyun Li1,*, Sen Pei2,*,†, Bin Chen3,*, Yimeng Song4, Tao Zhang5, Wan Yang6, Jeffrey Shaman2,†

See all authors and affiliations Science 16 Mar 2020: eabb3221 DOI: 10.1126/science.abb3221



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC337234 1/

Review of Aerosol Transmission of Influenza A Virus By Raymond Tellier

Influenza Virus Aerosols

By definition, aerosols are suspensions in air (or in a gas) of solid or liquid particles, small enough that they remain airborne for prolonged periods because of their low settling velocity. For spherical particles of unit density, settling times (for a 3-m fall) for specific diameters are 10 s for 100 μ m, 4 min for 20 μ m, 17 min for 10 μ m, and 62 min for 5 μ m; particles with a diameter <3 μ m essentially do not settle. Settling times can be further affected by air turbulence (*10,11*).



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC337234 1/

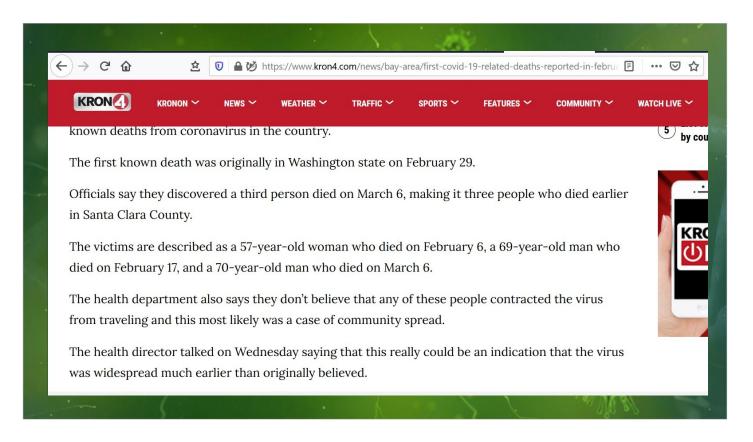
Review of Aerosol Transmission of Influenza A Viruses By Raymond Tellier

Aerosol transmission of viruses is virtually unstoppable. Remarkably, the extent of aerosol transmission of well known/studied viruses such as the influenza viruses appears to remain unclear and the subject of controversy.

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	All Topics	۹	Santa Clara County, California		Tel My new
-	Population estimates, July 1, 2019, (V2019)			1,927,852	
1	White alone, percent			▲ 53.1%	
	Black or African American alone, percent (a)			▲ 2.8%	
1000	American Indian and Alaska Native alone, percent (a)			▲ 1.2%	
	Asian alone, percent (a)			▲ 38.3%	
	Native Hawaiian and Other Pacific Islander alone, percent (a)			▲ 0.5%	
	1 Two or More Races, percent			▲ 4.1%	X
Non-Roy	Hispanic or Latino, percent (b)			▲ 25.3%	
	O White alone, not Hispanic or Latino, percent			▲ 31.0%	
	Population Characteristics				DI
. ~	⑦ Veterans, 2014-2018			53,119	
1	Foreign born persons, percent, 2014-2018			38.7%	
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https://www.census.gov/quickfacts/santaclaracountycal ifornia

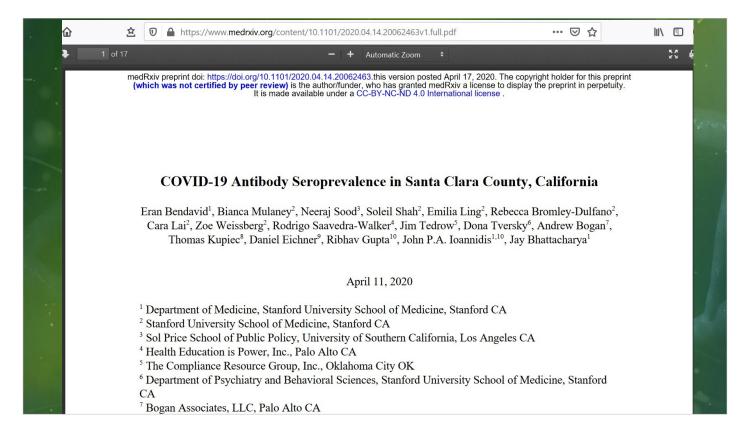
- United States Census demographic numbers for Santa Clara County, California
- Thirty eight percent of residents self-identify as "Asian" which may include South Asians (India, Pakistan, etc.) and even people of Middle Eastern extraction (e.g. Iran). In common experience, a high fraction, possibly even thirty-eight percent of residents are of Chinese extraction.
- Apple is in Santa Clara County, CA and has close ties to China due to manufacturing.



https://www.kron4.com/news/bay-area/first-covid-19-rel ated-deaths-reported-in-february-in-santa-clara-county /

KRON Channel 4 report on discovery of earlier coronavirus COVID-19 deaths in Santa Clara County, California. Earliest death on February 6, 2020, earlier than first known case in Washington State.

Not at all surprising given the close ties between Santa Clara County and China.



https://www.medrxiv.org/content/10.1101/2020.04.14.2 0062463v1.full.pdf

COVID-19 Antibody Seroprevalence in Santa Clara County, California by Eran Bendavid et al

Preliminary results. Not peer reviewed. Bitterly attacked. Suggests infection fatality rate in Santa Clara County is 0.1 to 0.2 percent (much lower than 1.0 percent number widely cited).

Given many problems in coronavirus response and the close ties between China and Santa Clara County, California, results should not be surprising.

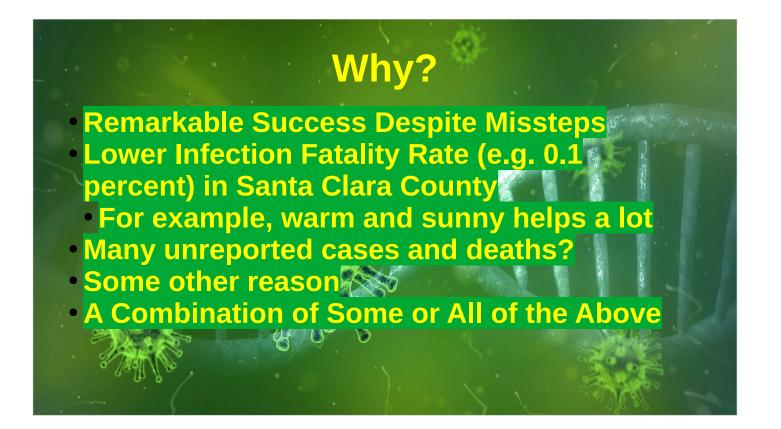
Results

The unadjusted prevalence of antibodies to SARS-CoV-2 in Santa Clara County was 1.5% (exact binomial 95CI 1.11-1.97%), and the population-weighted prevalence was 2.81% (95CI 2.24-3.37%). Under the three scenarios for test performance characteristics, the population prevalence of COVID-19 in Santa Clara ranged from 2.49% (95CI 1.80-3.17%) to 4.16% (2.58-5.70%). These prevalence estimates represent a range between 48,000 and 81,000 people infected in Santa Clara County by early April, 50-85-fold more than the number of confirmed cases.



https://www.medrxiv.org/content/10.1101/2020.04.14.2 0062463v1.full.pdf

- COVID-19 Antibody Seroprevalence in Santa Clara County, California by Eran Bendavid et al
- Probably based on about 45 positive antibody test results from sample of 3,330 people recruited using Facebook. This is a *small* number subject to unclear systematic biases, such as a cluster of facebook friends who were mildly symptomatic.
- Asians (e.g Chinese nationals and Chinese Americans) *underrepresented* in the sample according to preprint.



Multi-factorial (aka multi-dimensional) data is difficult to analyze. Even if there are only two independent factors controlling mortality from Sars-COV-2 infection, this can produce confusing and even contradictory data and results. There are probably more than two factors involved in COVID-19 (age and pre-existing medical conditions) and there is in addition strong evidence for at least one seasonal factor such as temperature or sunlight levels in historical pneumonia death data.

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