

COVID-19: THE GIFT OF FAMILY DISCUSSION TOPICS [UPDATE-1]

[NB: Note the byline – I'm stepping on Jim White's beat today. Updates will appear at the bottom. /~Rayne]

There's nothing quite like receiving an email from my father first thing in the morning. He's not a chatty dude; I can count on two hands the number of emails I've received from him in the last five years. When he pops me a note I know he's been stewing on whatever he sent.

Today he sent me and my siblings a link to a report about study of CT scans used to screen COVID-19 patients:

CT provides best diagnosis for COVID-19

Date: February 26, 2020

Source: Radiological Society of North America

Summary: In a study of more than 1,000 patients published in the journal Radiology, chest CT outperformed lab testing in the diagnosis of 2019 novel coronavirus disease (COVID-19). The researchers concluded that CT should be used as the primary screening tool for COVID-19.

Dad was also worried about the reliability of Chinese tests. Okay, so noted – if I go to China any time soon I'll treat them with suspicion. Thanks for the email, Pop, and thanks to my siblings for the flurry of follow-up messages.

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I'm far more worried about the U.S. tests which are still extremely limited after the CDC's

screw up by devising its own test instead of using effective tests already available.

Key Missteps at the CDC Have Set Back Its Ability to Detect the Potential Spread of Coronavirus

The CDC designed a flawed test for COVID-19, then took weeks to figure out a fix so state and local labs could use it. New York still doesn't trust the test's accuracy.

by Caroline Chen, Marshall Allen, Lexi Churchill and Isaac Arnsdorf Feb. 28, 12:13 a.m. EST

There's been a contamination issue in the government lab responsible for the tests as well – negative control reagent not handled properly in kits.

The United States badly bungled coronavirus testing—but things may soon improve

By Jon Cohen Feb. 28, 2020 , 5:45 PM – ScienceDaily

. . .

Scoop: Lab for coronavirus test kits may have been contaminated

by Jonathan Swan, Caitlin Owens for Axios

Updated Mar 1, 2020 – Health

I don't have a lot of faith this problem will be fixed promptly. FDA is supposed to approve the tests, but...

CDC blocked FDA official from premises

Sent to help the administration's coronavirus response, a test specialist was stopped at CDC's door and made

to wait overnight.

By DAN DIAMOND 03/03/2020 03:23
PM EST – Updated: 03/03/2020
03:53 PM EST

We're also seeing continued problems with testing due to lack of supply affecting first responders. Here's a letter from a quarantined nurse in California who has had symptoms matching COVID-19, whose doctor and county public health officer signed off on getting her tested, and the CDC refused to test her.

<https://act.-nationalnursesunited.org/page/-/files/graphics/NU-Quarantine-RN-press-conf-statement.pdf>

The key symptom distinguishing COVID-19 from influenza is the chest pressure and cough. Influenza has a productive 'wet' cough where COVID-19 infection is more likely to manifest a dry cough with more chest pressure and shortness of breath as the virus moves down the body. From WHO's China Mission report:

Symptoms of COVID-19 are non-specific and the disease presentation can range from no symptoms (asymptomatic) to severe pneumonia and death. As of 20 February 2020 and based on 55924 laboratory confirmed cases, typical signs and symptoms include: fever (87.9%), **dry cough (67.7%)**, fatigue (38.1%), sputum production (33.4%), shortness of breath (18.6%), sore throat (13.9%), headache (13.6%), myalgia or arthralgia (14.8%), chills (11.4%), nausea or vomiting (5.0%), nasal congestion (4.8%), diarrhea (3.7%), and hemoptysis (0.9%), and conjunctival congestion (0.8%).

People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever, on an average of 5-6 days after infection (mean incubation period 5-6 days, range

1-14 days). ...

(Source: <https://www.who.int/docs/default-source/coronavirus/who-china-joint-mission-on-covid-19-final-report.pdf>, page 11-12)

Because we can't expect adequate numbers of test kits for weeks – no matter what those goddamned lying jackasses in the White House say – asking for a CT scan if you need treatment can be a good move. Haven't seen other reports yet whether other forms of imaging like chest x-ray will work. However, the results of CT will change during course of infection:

Varied CT, clinical findings

In the second study, researchers at Sun Yat-sen University in Guangzhou, China, detailed the CT findings and clinical characteristics of six women 27 to 63 years old with COVID-19. None of the patients had such underlying diseases as diabetes, cancer, or respiratory disease. Five had had Wuhan or Hubei exposures.

They found that COVID-19's wide variety of manifestations on CT can vary over time. Early in the disease, lesions can appear round and nodular in the central lung, unlike their common patchy appearance between the membrane surrounding the lung and the body wall. One patient had 3 follow-up scans 4 to 14 days later that showed diverse lesions and that the primary lesions had been absorbed and replaced elsewhere by new ones.

On testing blood samples, the researchers observed normal or slightly decreased counts of leucocytes and lymphocytes and identified mildly decreased eosinophil counts in four of the patients. Four days later, follow-up testing revealed that the low eosinophil

counts remained abnormal and had dropped even further. “**The decrease of eosinophil count may be helpful for the early diagnosis of the disease,**” they wrote, calling for further study of the phenomenon. ...

(Source: <http://www.cidrap.umn.edu/-news-perspective/2020/03/study-reveals-sharp-increase-covid-19-kids-shenzhen>)

Blood test may work in tandem with CT, certainly faster to get than a CDC test for COVID-19.

Another potentially predictive risk factor for severe-critical cases: smoking, whether current or a past history. Explains why more men than women were severe-critical cases in China as men smoke more than women.

Tobacco-Use Disparity in Gene Expression of ACE2, the Receptor of 2019-nCov [NOT PEER REVIEWED]

Guoshuai Cai

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February 2020 (02:56:53 CET)

Americans overall may have fewer severe-critical cases because tobacco smoking has dropped considerably over the last three decades. A good thing since severe-critical cases need mechanical ventilators or intubation and we simply don't have enough equipment in our crappy health care system.

We don't know yet if vaping is another risk factor; it may depend on substances in vapor, with tobacco being most suspect. I haven't seen anything about marijuana use yet, whether smoked or vaped.

And *disinfect* (not just clean) your cell phones. Rather high nosocomial (hospital-acquired) infection rate with this bug in spite of aggressive PPE like full suits with hoods,

booties, gloves, face shields means we're dealing with possible airborne bug OR there's some other fomite (surface) transmission not being documented.

As of Monday it was estimated there were ~600 asymptomatic cases walking around Seattle. This short-ish piece is a must-read, especially the paragraph which begins, "We know that Wuhan went from an index case"

Cryptic transmission of novel coronavirus revealed by genomic epidemiology

2 Mar 2020 by Trevor Bedford – Bedford Lab

The Emerald City Comic Con convention begins on March 12 in Seattle, at which ~100K people from around the country and world are expected; the event has not been canceled.

As coronavirus concerns loom, Emerald City Comic Con exhibitors wrestle with the question: to con or not to con
March 5, 2020 at 6:00 am
Updated March 5, 2020 at 7:08 pm

Wouldn't want to cancel this massive social event and cause stock market disruption, oh no.
shaking my head

I'd expect an explosion of cases across the U.S. in about 9 weeks based on Bedford's estimate.

I know CT test may be inconclusive for me if I get this crap because an autoimmune disorder did a number on my chest ten years ago. I'm at high risk because of this pre-existing condition, as are family members because of their CVD and diabetes.

Must say there's nothing like a documented mortality rate of 7-13% for CVD and diabetes to put the fear of god in certain at-risk family members about vigorous frequent handwashing.

Now I have to stop family from going full

apocalyptic prepper. Somebody bought this household a half gallon of Lysol concentrate and three times more bleach than I've used in a year's time.

I can hardly wait to hear from my family again first thing in the morning.

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I do want to make one point perfectly clear, all snark aside.

**** The Republican Party is responsible for every COVID-19 fatality in the U.S. ****

They could have done the right thing and removed Trump by convicting him for obvious abuse of power and obstruction of Congress instead of being chickenshits afraid of Trump's mean tweets. He's a clear and present national security threat – this pandemic proves it.

VP Mike Pence has done a crappy job so far but we can't tell how much of this disaster is his alone, or a result of also trying to keep his malignant narcissist from melting down while handling a mounting pandemic. As long as Trump's in office they will both continue to screw this up.

The GOP could have done more to assure the pandemic response team remained in place with funding after Trump's Senate-approved appointee John Bolton rejigged the National Security Council in May 2018.

But no, the Republican Party is as incompetent and unequal to the job of protecting the American people as their leader in the White House.

Vote these walking disasters out of office in November; the life you save in doing so may be your own.

UPDATE-1 – 2:10 P.M. ET –

Wouldn't you know it but as soon as I pressed Publish there was a message in my inbox that Emerald City Comic Con will be rescheduled to

later this year, some time this summer.

This is the right thing to do given the number of cryptic COVID-19 cases in Seattle. It's unfortunate the burden of this decision fell solely on the convention organizers in the absence of public guidelines about social isolation from the federal government.