

The Coronal Virus and Challenge to Our State Organizations

Part 9

Friday March 20, 2020

Month	World Virus Cases ⁱ	World Virus Deaths
January 31	10,017	120
February 7	30,000	700
February 14	65,000	1,400
February 21	77,000	2,250
February 28	84,000	3,000
March 6	101,000	3,408
March 13	136,000	5,000
March 20	250,000	10,000

Path of the Virus

The virus continues from first, limited individual cases to clusters of cases now to an explosion. That sequence is clearest in communities near Seattle. This is not a linear adding one case at a time but a pattern of each positive case then spreading to 5 or 10 more people. This is an exponential function. It is the path of an epidemic with every state in the nation showing at least one case. The initial cases came from persons who had traveled from China and then from other areas of Asia and then from Europe. But starting in the Seattle area we began to see the most serious manifestation and that is *community spread*. This is when someone in the country then gives the infection to others.

Cases In Texasⁱⁱ

Date	Cases	Deaths
March 19, 2020	173	3

Now simply checking travelers at the border is not adequate. The states of Washington, New York and California have the highest number of reported cases. The transfer of large numbers to San Antonio of potential cases, if not adequately quarantined and held until no symptoms appear or until the disease disappears in those infected, must be watched very closely. One news estimate this morning March 20 is over 200 cases in Texas. We cannot know the

actual number at any point in time as data are based upon using virus detection kits and then reporting. Reported cases thus are some order of approximation of a larger number yet untested. On March 19, 2020, Governor Abbott issued an executive order restricting social gatherings.ⁱⁱⁱ It was preceded earlier that day by the Health Commissioner, John Hellerstedt, MD issuing a public health disaster.^{iv}

The challenge is how do we control the spread from each infected person to several others. The answer is to enforce a strict quarantine on each infected person and minimize as much close social contact among all people as possible. That effort began in the United States this week. Quarantine cannot be strictly observed or enforced unless persons are placed in guarded quarters or tagged with some form of transponder that communicates geographical position. There are challenges with reducing social movement and contact. Some persons may refuse to comply and there are times when a person must venture out for needed supplies. Another compounding problem is the growing number of homeless persons.

This is the most serious pandemic that the United States has faced since the 1918 Spanish Flu. In terms of disruptions it will exceed the bombing of Pearl Harbor bringing America into World War II and the attack on 9/11/2001. Pandemics occurred in the 1950's with polio but mainly children were most at risk. This disease is infectious for all ages but most deadly for older persons and persons with existing health problems. Dealing with the disease probably means that millions in the United States will be exposed and millions will become infected. Given the experience of China this will occur through April and into June of this year. By then most of the persons in urban areas and that travel will have been exposed. The medical community and hospitals will probably be overwhelmed.

What We As Individuals and Members Of Our Organizations Can Do

We must be well-informed about this epidemic, how it spreads and the risks to others. As a general rule self-isolate as much as possible. When with others, maintain 6 feet of distance. Be informed on the symptoms, how it spreads including its presence on surfaces like door handles, elevator buttons, hand rails, desks, telephones and paper. It is reported to remain infectious from a few hours to several days on some surfaces.

Each organization should have a website available to all that provides data about the virus and how to address prevention as well as reporting suspected infections. Think through agency procedures that could increase the risk of infection. Offices that serve the public or procedures that require coming to agency offices as much as possible should likely be replaced by the use of the telephone and internet access. Remember all that can be done to minimize social contact helps control spread.

Use this site from the Texas Department of State Health Services to track their case recording and provide daily information about the issue: <https://dshs.texas.gov/coronavirus/>

Economic Issues

A separate consideration apart from the specifics of the virus, prevention and treatment is how this is affecting the community and the economy. The immediate issues are levels of working and trade. Holding one's job is critical to survival but if one works with others then the risk of acquiring the virus is increased.

Here is a fact about our state. According to the Texas Restaurant Association, more than 50% of food consumed by citizens of Texas comes from the approximately 55,000 restaurants in the Lone Star State. The closing of these businesses or modifying them to offer only take-out food is an illustration of how dependent most of us are on being socially engaged and dependent on complex lines

of food procurement. If you add employment in bars and restaurants, there may be 500,000 or more now out of work because of the closure of being inside restaurants and bars.

Broad Economic Indicators of the Impact

Major indicators of economic activity continue to contract. Most central to the Texas economy is the price of oil and it has dropped as low as low as \$20 and closed Thursday, March 19, 2020 at \$24. Simply watch the price you pay for a gallon of gasoline. When it is below \$2, then critical implications are underway. World, nation and the state's economy is being significantly damaged by the virus including needed steps to reduce social contact but reducing business from shopping, going to restaurants, travel, etc.

Current Situation: Coronavirus Disease 2019 (COVID-19) Outbreak

Progress may be occurring in treating the disease. Two prescription drugs one long used with malaria are promising. These are hydroxychloroquine that may keep the virus from invading human cells and has been used with malaria for decades. The second is a new drug created by Gilead and is an experimental antiviral drug, remdesivir.

Research References

Several laboratories are working on a vaccine, but finding one including testing and then producing and providing it as the annual flu vaccine is done is probably 18 months away. Currently an experimental vaccine is being tested in State of Washington and China

<https://www.clinicaltrialsarena.com/analysis/coronavirus-mers-cov-drugs/>

Remdesivir <https://www.gilead.com/news-and-press/press-room/press-releases/2020/3/new-clinical-study-data-for-gileads-investigational-hiv-1-capsid-inhibitor-gs-6207-presented-at-croi-2020>

Drug used for many years to treat malaria

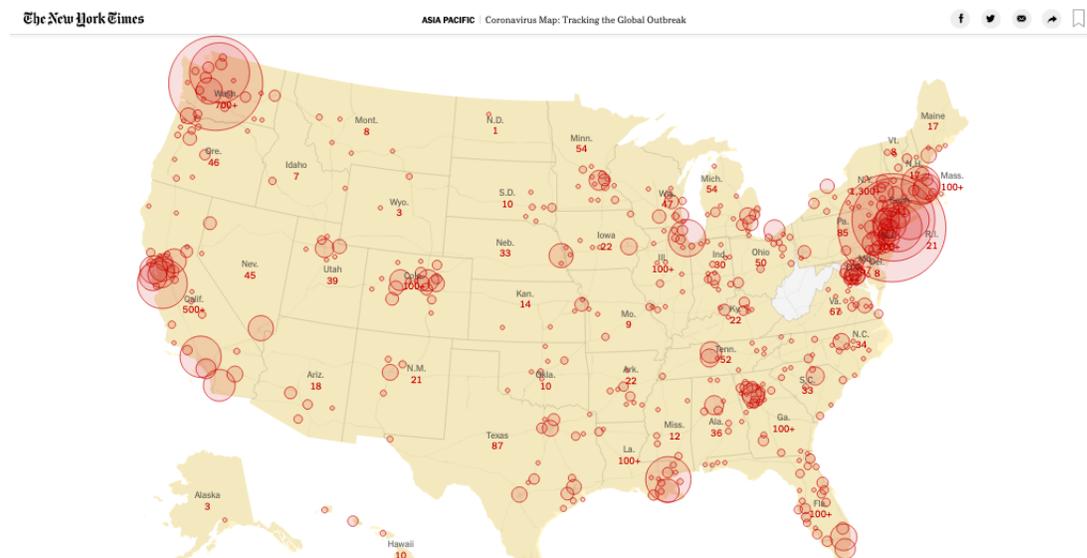
Hydroxychloroquine <https://www.nature.com/articles/s41421-020-0156-0>

The link below is a detailed and popular examination of the pandemic with a useful summary of what is known and steps to take to lessen impact. One major message is to social isolate as much as possible. We are in the “mitigation” stage. We must act rapidly. Austin and most of Texas is starting to get that message.

<https://medium.com/@tomaspuoyo/coronavirus-act-today-or-people-will-die-f4d3d9cd99ca>

Building organizational and personal resiliency is the critical response for all Texans!

Map of All Areas of Infection in All States



Key Economic Indicators: Oil and Stock Market





ⁱ <https://www.worldometers.info/coronavirus/>

ⁱⁱ <https://www.livescience.com/coronavirus-updates-united-states.html>

ⁱⁱⁱ https://static.texastribune.org/media/files/f9443207c5056651481c67b28183f372/EO-GA_08_COVID-19_preparedness_and_mitigation_FINAL_03-19-2020_1.pdf?_ga=2.244795461.1548779722.1584662527-535614072.1583748461

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https://gov.texas.gov/uploads/files/press/DECLARATION_of_public_health_disaster_Dr_Hellerstedt_03-19-2020.pdf