

The Coronal Virus and Challenge to Our State Organizations

Part 7

Friday March 8, 2020

Month	World Virus Cases	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

Path of the Virus

The virus (covid-19) has been known since December of 2019 and appears to come from a Chinese city, Wuhan, in the province of Hubei in one of China's inland more industrial regions. The most frequent explanation is that the virus jumped from an animal, a bat or a pangolin (scaled, anteater-like mammal), to a human in a food store. The virus has spread rapidly in all of China and now appears in over 87 countries. Asia, Europe and North America are the continents with the highest rates of infection. Limited numbers from Africa and Latin America may be more a function of the level of health systems' capabilities. But covid-19 is far less widespread than the common flu (9 to 45 million cases each year) that has led to over 85,000 deaths this year. Importantly comparisons of it to the common flu raise concerns of the extent of the spread in coming months and the resulting deaths, illnesses, medical costs and broader economic impacts.

In the United States the greatest number of cases are in the states of Washington and California. There are a total of 179 cases. There have been 10 deaths in Washington and 1 in California. 17 states have confirmed cases. Texas has 1 at Lackland Air Force base in San Antonio that was flown there by the Federal government after being evacuated from Asia. One confirmed case was announced in

Ft. Bend near Houston and Austin has one potential case as of the first week of March.

Health Threats

This virus is highly contagious with a 2-4% fatality rate as compared to .01% for the seasonal flu. These are grave numbers. It means that if the United States cannot contain the spread of the virus then as high as 4%, 13 million deaths out of a population of 330 million can occur. The world population of nearly 8 billion means the risk of 300 million deaths. The last comparative pandemic was the Spanish Flu of 1918 when a third of the world's population, 500 million were infected and with a 10% fatality rate resulted in 50 million killed.¹ Without a vaccine to prevent infection or some drug to cure the infection the first order of action is containment including quarantine.

Persons may be infected but without symptoms for a week or more and there is some concern that current tests can miss such infected persons. It is thought that persons can spread the disease before being detected as infected. The virus can live on various surfaces for as much as several days. Some persons seem to be able to be clear of symptoms and then suffer a relapse more serious. There are no persons that appear to have natural immunity and like the annual flu, it could infect millions of persons this year and next.

Economic Consequences

The spread of the virus is rolling back much of the globalization created in the last 4+ decades as well as threatening manufacturing, energy and food production and supplies of many things. Perhaps the most immediate problem is the availability of a variety of pharmaceutical items, including masks, antibiotics, medicines and vaccines.

¹ <https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html>

According to US Congressional hearings, something like 80% of present medicines consumed in the United States are produced in China.² This includes Chinese companies and foreign drug companies as well as American companies that have outsourced their drug manufacture in joint ventures with Chinese partners. According to Rosemary Gibson³ of the Hastings Center Bioethics Research Institute, who authored a book in 2018, *China Rx*, on the theme, the dependency is alarming.

Gibson cites medical newsletters giving the estimate that today some 80% of all pharmaceutical active ingredients in the United States are made in China. “It’s not just the ingredients. It’s also the chemical precursors, the chemical building blocks used to make the active ingredients. We are dependent on China for the chemical building blocks to make a whole category of antibiotics... known as cephalosporins. They are used in the United States thousands of times every day for people with very serious infections.”

The “made in China” drugs today include most antibiotics, birth control pills, blood pressure medicines such as valsartan, blood thinners such as heparin, and various cancer drugs. It includes such common medicines as penicillin, ascorbic acid (Vitamin C), and aspirin. The list also includes medications to treat HIV, Alzheimer’s disease, bipolar disorder, schizophrenia, cancer, depression, and epilepsy, among others. A recent Department of Commerce study found that 97 percent of all antibiotics in the United States came from China.

Few of these drugs are labeled “made in China” as drug companies in the USA are not required to reveal their sourcing. Rosemary Gibson states that the dependency on China for medicines and other health products is so great that, “...if China shut the door tomor-

² <https://www.uscc.gov/sites/default/files/2019-10/July%2031,%202019%20Hearing%20Transcript.pdf>

³ <https://www.thehastingscenter.org/team/rosemary-gibson/>

row, within a couple of months, hospitals in the United States would cease to function.” That may not be so far off.

Challenges for State Agencies

For state agencies the first challenge is to deal with the stresses on employees, work with other agencies and businesses struggling with shortages and provide local leadership in conditions as vast as any have seen. State agencies should continuously update employees and those the agencies work with.

Agencies that have substantial general contact with the public such as health, public safety, child and adult protective services, and education may need to equip employees with sanitation equipment such as masks and hand sanitizers. Institutions that house people must especially guard against infections. These steps must be taken in what is appearing to be growing shortages of routine and prescriptive medications as well as sanitizing chemicals, disposable paper products and routine cleaning supplies.

Agencies would be well-advised to anticipate higher levels of absenteeism, developing backup procedures when critical persons are absent, expanding remote and work-from-home capabilities, etc. It might be well in certain areas to encourage workers to stay home. Amazon with its corporate headquarters in Seattle is encouraging many to stay home and work from there for the rest of the month of March.

State agencies through their lines of contact with Austin and between their fellow agencies will be better informed than many local agencies, groups and businesses. It is important to reach out to local groups including neighbors to keep all better informed and prepared.

This virus has exposed the vulnerability in many dimensions of our current world. The volatility in stock markets around the world and

in the major source of energy, oil, in the world illustrates the building panics.

Building organizational and personal resiliency is the critical response. Examining the narrow and precarious source of supply of many health and medical items suggests increasing research and development in Texas to promote more local sources and more redundancy in such critical elements of health and wellbeing!

Individual health, organizational effectiveness under increased absenteeism and the impact on the health and hospital system are all one dimension of the impact of this virus. The second impact is upon local, national and world economies. The initial impact is being seen in travel, lodging, restaurant and entertainment industries. In the coming months we will see impacts in manufacturing, sales, housing, mining and energy as a slowing world economy reacts to deaths, illnesses and quarantines. The general value of traded companies as reflected on indices like stock averages or measures of the production and consumption of energy like oil are indicators of the rate of the second dimension. In the coming months if the impact continues, unemployment will rise, tax revenues decline and public fears about general security will rise.

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

Newly Issued for First Responders:

<https://dshs.texas.gov/coronavirus/ems.aspx>

How Some Are Coping:

<https://www.nytimes.com/2020/03/05/business/coronavirus-offices-covid-19.html>

<https://www.kxan.com/news/coronavirus/texas-2nd-3rd-confirmed-covid-19-cases-announced-in-harris-county/>

<https://www.dshs.texas.gov/coronavirus/>

Broad Economic Indicators of the Impact



