NOVEL CORONAVIRUS

Yao Akpalu

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Nomenclature of the Novel Coronavirus

VIRUS:

Formally: Novel Coronavirus (2019-nCoV)

Now: SARS-CoV-2

DISEASE:COVID-19

Basics

- Coronaviruses are common in many species of animals-camels, cattle, cats, and bats.
- Rarely, animal coronaviruses can infect humans. There are several which have not yet infected humans.
- There are several known Coronaviruses in humans.
- A novel coronavirus is a new strain that has not been previously identified in humans.
- Three coronaviruses have infected humans in the past 20 years-**SARS-CoV** (2003), **MERS-CoV** (2012), and the current **SARS-CoV-2** (2019).
- **SARS-CoV-2** originated from Wuhan in China.

Symptoms

➤ Incubation Period: 2-14 days.
➤ Severity: Mild to severe illness and death.
➤ High risk individuals (old age, pre-existing medical conditions) more vulnerable to severe illness.
➤ Symptoms include:
▪ Fever.
▪ Cough, sore throat, runny nose.
▪ Difficulty in breathing/Shortness of breath.
▪ Nausea, vomiting, and diarrhea.

Transmission

Initial transmission from animals to humans (linked to a seafood and live animals market in Wuhan in China)

Person-to-person MAINLY

- Close contacts (6 ft for several hours)
- Respiratory droplets during coughing or sneezing
- Asymptomatic (not yet sick) Infected individuals

Other possibilities:

- Contaminated objects and surfaces
- Mother-to-child
- Oro-fecal

Diagnosis

Diagnostic testing on:
- Respiratory Samples
- Blood

Treatment

No specific treatment for COVID-19 is available currently. Symptomatic and supportive treatment

Vaccination

No vaccine for COVID-19 is available currently

Prevention: The only tool in the box

➤ Avoid close contact with people who are sick.
➤ Avoid touching eyes, nose, and mouth with unwashed hands.
➤ Stay home when you are sick.
➤ Cover your cough or sneeze with a tissue, throw the tissue in the trash, and wash your hands.
➤ Wash your hands often with soap and water after visiting the bathroom; before eating; and after blowing your nose, coughing, or sneezing. Or use hand sanitizer (≥ 60% alcohol)

Prevention: The only tool in the box

➢ Clean and disinfect frequently touched objects and surfaces.
➢ **AVOID TRAVEL TO AREAS WITH ONGOING TRANSMISSION**
➢ Face masks: For symptomatic individuals, caretakers at home, and healthcare workers **ONLY.**

Locations with Confirmed COVID-19 Cases

Situation on Feb. 26,2020

Cases World Wide: 81,280 Deaths: 2,770 (Fatality:3.3%)
China mainland:78,194   Deaths: 2,718
Other countries (37):2,918   Deaths: 43
US Cases Total: 56
Travel-related: 12
Person-to-person spread: 2
Diamond Princess Cruise Ship: 42
7 States: AZ, CA, IL, MA, NY, WA,WS

Countries highly affected currently: China (81,280)
South Korea (1,261), Japan (178), Italy (374), Iran (139)

PANDEMIC?: Not Yet!

CDC and others agencies have been Planning, Preparing, Practicing for an Influenza Pandemic and other Eventualities Giving Rise to:

- More cases of disease worldwide and in U.S.
- Person-to-person (community) spread worldwide and in U.S.
- Large numbers of people needing medical care at same time.
- High number of hospital visits, hospitalizations and deaths.
- Overwhelming of hospitals facilities and Healthcare Workers.

PANDEMIC?: Not Yet!

- Overwhelming of EMS, law enforcement and transportation
- Absenteeism/closures in schools, daycares, workplaces, businesses, etc

- Other effects on health, industry, economy, and social life.

- Most Important Response Strategy: Non Pharmaceutical Interventions (NPIs) at Personal, Community and Environmental Levels

INFLUENZA

- Influenza (Flu) is an acute respiratory infection caused by influenza viruses.
- Highly contagious and causes mild to severe illness including death.
- High risk individuals: children, the elderly, pregnant women, and people with long-term medical conditions.
- Symptoms: Fever, Cough, Sore throat, runny nose, headache, body aches, muscle and joint pains, and fatigue.

INFLUENZA

- Transmission: Person-to-person (droplets), contaminated object/surface
- Treatment: Antiviral drugs, Supportive.
- Prevention:
1. Vaccination
2. Cough etiquette
3. Hand washing
4. Avoid contacts with the sick
5. Stay home when sick
6. Avoid group activities.

INFLUENZA: 2019-2020 Season

CDC estimates **October 1, 2019-February 15, 2020**, there have been:
- 29,000,000 – 41,000,000 flu illnesses
- 13,000,000 – 19,000,000 flu medical visits
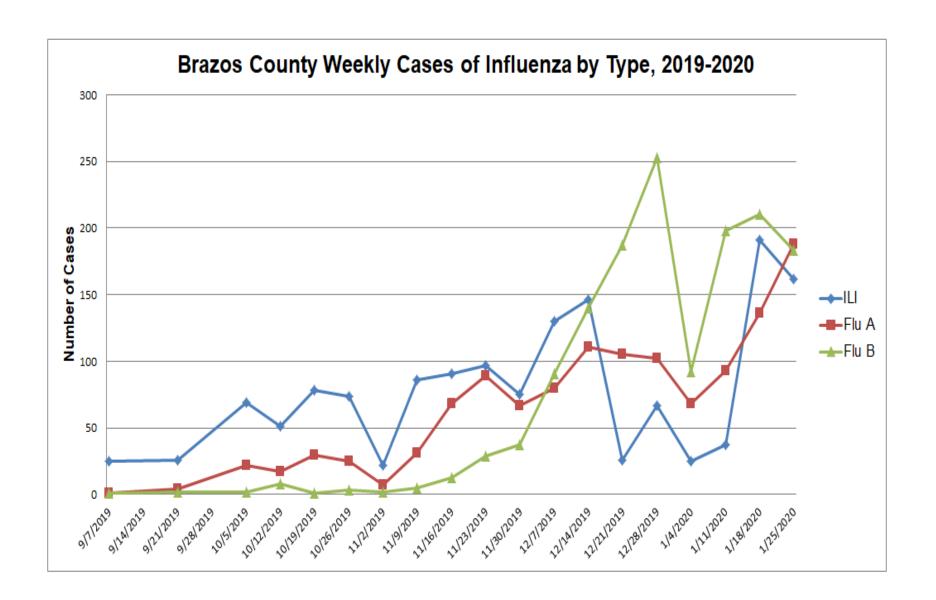- 180,000 – 500,000   flu hospitalizations
- 16,000 –   41,000   flu deaths

Brazos County Weekly Flu Activity, 2019-2020 Season

Weekend	ILI	Flu A	Flu B	Flu ND	Total 2019	Total 2018
10/5/2019	69	22	2	0	93	7
10/12/2019	51	17	8	0	76	17
10/19/2019	78	30	1	0	109	19
10/26/2019	74	25	3	0	102	23
11/2/2019	22	7	2	0	31	23
11/9/2019	86	31	5	0	122	25
11/16/2019	91	68	13	0	172	22
11/23/2019	97	89	29	0	215	18
11/30/2019	75	67	37	0	179	0
12/7/2019	130	80	91	0	301	48
12/14/2019	146	111	140	0	397	27
12/21/2019	26	105	187	1	319	28
12/28/2019	67	102	253	0	422	62
1/4/2020	25	68	92	0	185	31
1/11/2020	37	93	198	0	328	59
1/18/2020	191	136	210	0	537	111
1/25/2020	162	188	183	0	533	163
2/1/2020	215	198	165	0	578	325
2/8/2020	205	298	65	0	568	274
2/15/2020	168	199	71	0	438	184
2/22/2020	301	256	97	0	654	248
TOTALS	2,316	1,852	1,755	1	6,359*	1,714

*Total at February 22, 2020

Brazos County Monthly Total Flu Activity, 2014-2020

MONTH	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
October	24	105	128	98	66	380
November	225	137	27	223	88	719
December	1102	172	101	1775	165	1439
January	1524	369	184	2023	364	1583
February	860	351	1279	2062	1031	2238*
March	384	505	448	386	978	
April	194	629	227	62	564	
May	35	260	29	8	267	
June	5	58	15	13	124	
July	8	4	8	2	49	
August	5	281	43	7	19	
September	8	600	69	81	59	
TOTALS	4374	3471	2558	6740	3774	6359*

Total February 22, 2020

Brazos County Weekly Cases of Influenza by Type, 2019-2020

QUESTIONS

References

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