# Minutes

# LGC Healthcare Management & Community Wellness Advisory Board

#  Meeting – July 29, 2020

# LGC Director Nancy Muller opened the meeting in ZOOM at 2:00 p.m.

# Members in attendance were: Marissa Beck (Walgreen’s), Rachel Levkowicz (Medtronic), Paul Wieters, (City of Charleston), David Carroll (Palmetto Primary Care Physicians), Emily Cedzo (Coastal Conservation League), Liz Lohr (Benefit Focus).

# Members absent were: Susan Gallo (Bishop Gadsden), Suzanne Thomas (MUSC), Andrea Clements (Roper St. Francis), Lee Taylor (DHEC), Vickie Cummings (Trident Healthcare), Sharon Goss (BCD Council of Governments), Katie Zimmerman (Charleston Moves)

# Guests Present: Renee Linyard-Gary (Trident United Way), Margriet Wright (UofSC), Terri Wolfer (UofSC), Mathew Guah (SC State University), Alyssa Matthies (City of Charleston intern), Robert Ball (presenter).

# Following brief self-introductions, Muller turned the meeting over to infectious diseases epidemiologist Dr. Robert Ball. His slides are attached to these minutes.

# Ball said he called the COVID-19 virus a pandemic – meaning it spreads globally - in February, as it was much like MERS, SARS 1 and SARS 2. Dr. Anthony Fauci expressed similar concern in a January 23, 2020 article in JAMA. Like these other viral strands, the Corona virus mutates, although there is only one major and many minor mutations. Ball said the best resources about the virus is [www.cdc.gov](http://www.cdc.gov).

# Symptoms include fever, cough, difficulty breathing, runny nose, and loss of the sense of smell or taste. But they can dissipate into cranial nerve dysfunction and peripheral nerve symptoms such as tingling or numbness of extremities. Adults can develop blood clots and severe pneumonia, as well as experience strokes and heart failure. Pneumonia is the number one reason for putting a patient on a ventilator. Children can have different symptoms but in the more severe cases can experience multiple organ inflammation and cardiac arrest. The list of symptoms is growing – which is scary.

# Nevertheless, we have “come a long way” with drugs for therapeutic options, including Remdesivir and plasma transfusions from patients who have developed antibodies. Dr. Fauci is very optimistic about the use of Remdesivir. Ball explained that when the body is fighting a virus for weeks or even months, its host inflammatory response results in a cytokine storm. More clinical trials are needed to evaluate the effectiveness of convalescent plasma.

# The virus spreads principally through respiratory droplets from an infected person who coughs, sneezes, sings, or shouts. But droplets can linger in the area for several hours, as well as linger on common touch surfaces such as door handles. However, air transmission and surfaces are less important than direct contact. This is why wearing a mask, practicing social distancing and frequently washing hands for 20 seconds are so important. Face masks accomplish three things: 1) they protect the wearer from others; they protect others from the wearer of a mask; and they remind an individual not to touch his mouth or nose or face in general – and thereby contaminate afterwards touched surfaces with respiratory droplets or pick up such droplets from others infected with the virus.

# Although the largest size particles do the most damage in terms of infecting others, the smaller size particles travel further distances, as much as 15 feet. This is why tiny droplets become more important than the larger particles. We are seeing evidence of more airborne transmission. A “cough cloud” can travel as much as 24 feet. If in a room with others and a person sneezes or coughs, Ball advises we hold our breaths and wait to exhale when out of the 24-foot range. As an example, he described being in one grocery store aisle and hearing a shopper in the next aisle cough. The virus spreads like wildfire, exponentially. In one example cited, 87% of all choir members became infected by one infected choir member singing among them. Even with some mitigation achieved by social distancing, in just six weeks, 243 cases of COVID-19 can spring from just one “index” case. While the incubation period is typically 4-5 days, this can range from 2 – 14 days.

# Spread of the virus during the first 30 days from the widespread announcement of the pandemic can be blamed simply on our naiveté. However, the huge upsurge in cases in June following re-openings in May and Memorial Day congregating of groups can be blamed only on stupidity. Now, we are at a tipping point, witnessing 1,000 deaths per day. The CDC now estimates a five to tenfold increase in the number cases. Ball is certain the U.S. will witness 250,000 deaths by Christmas, if not Thanksgiving. Already, the world has documented 16.8 million confirmed cases and 661,349 deaths, 149,375 in the U.S. This puts the mortality rate in the U.S. at something close to 5%.

# In SC, there are 2,000 deaths represented by 78,000 confirmed cases.

# The central problem is that the U.S. has not undergone a lockdown like Europe and the U.K. did, without exceptions. Abroad, there was a central plan and compliance. In the U.S., there was widespread denial especially at top government and variation in response among the states. There is a lot of misinformation spread by anti-government, anti-science, anti-public health types of Americans. It is essential that every teen and adult American wear a mask, everyone practices social distancing, and everyone washes hands thoroughly and frequently, avoiding crowds and touching common surfaces.

# Masks have to cover the nose and mouth. The N95 mask is for frontline healthcare workers, blocking 95-99% of the particles. The disposable surgical masks block 70-75% and are fine for the rest of us. Handmade cloth masks should have three layers of cloth and a metal bar that bends to fit the bridge of the nose for a close fit. Even then, cloth masks block only 50-60% of the particles. Although 40-50% of all cases are asymptomatic, it is the sick patients who infect others at 3-4 times the rate of asymptomatic individuals. That’s why it is critical to separate – isolate – sick people from others. Those who know they have been exposed should self-quarantine for 14 days.

# The COVID-19 virus shows a propensity for nosocomial spreading. The rate of hospitalization rises with age. Forty percent of all deaths in the U.S. to date are among nursing home residents. Seattle should have been a warning to the rest of the country but nursing homes were slow to take steps of precaution. Many lacked the resources to do so and got no help from the federal government. We can flatten the curve if 75% practice social distancing, but that doesn’t mean the virus goes away. ICU units of hospitals across the country are at 90% of their capacity. Healthcare workers are worn out. We have an epidemic of hospital worker burnout, not just among front line providers but also support teams including IT, procurement, etc. Michael Osterholm with the CIDRAP predicts multiple peaks, expecting the COVID-19 virus to be with us for several years to come.

# Dr. Ball shared a matrix illustrating the occupational risk of contracting COVID-19 against the risk of dying from the virus, borrowed from the New England Journal of Medicine May 26, 2020 issue.

# There are three types of tests. The PCR detects RNA snippets and is most widely used today. To be able to do a PCR test with saliva would be a game-changer. The antibody test detects pieces of the virus and requires the draw of a blood sample. But it remains unknown how long the antibodies exist and thus how long an individual who was infected remains protected from the virus in the future. A new nasal swab test for antigen received FDA approval in early May. When validated, this is likely to be an important test in the future. Although it is possible to detect the virus in stool samples, the transmission via feces appears minimal.

# Dr. Ball is on the state’s vaccine allocation guidelines task force. Vaccines are under development by Johnson & Johnson,Pfizer, Moderna and others but none has FDA approval. Moderna is furthest ahead beginning Phase 3 trials with humans.

# After concluding his presentation, several members asked questions, including what modifications are needed in healthcare facilities to keep both patients and providers protected. Dr. Ball spoke to the value of booster pumps to double air flow, ventilation, and HEPA air filters and air cleaners. A question was asked about the use of face shields by faculty, but Ball does not recommend shields in lieu of face masks because of the openings on the sides and top of most shields except the kind worn by frontline providers render them less effective than medical-grade face masks.

# Muller joined those present in thanking Dr. Ball for an exceptionally informative presentation on the topic of the COVID-19 virus pandemic. She thanked all in attendance including guests. She said she will be in touch with the Advisory Board in the early Fall to schedule the next meeting of the Advisory Board, likely late November or early December.

# The meeting ended at approximately 3:15 p.m.

# Attachment – Power Point slide set prepared by Dr. Robert Ball

# Nancy Muller

# August 3, 2020

#