

## *Getting ready for the next pandemic COVID-19: Why we need to be more prepared and less scared*

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### **BACKGROUND**

As of March 2020, we are almost at the three-month mark of COVID-19 with 90,663 reported cases worldwide and 3,124 reported deaths spread over six continents and 67 countries. As of March 3, 2020, the United States announced its six COVID-19-related deaths with 103 confirmed cases spread throughout fourteen states.<sup>1</sup> It is important to note, however, that even as the number of reported cases and deaths continue to increase, the COVID-19 overall case fatality rate thus far stands at 3.4 percent. It is important to keep in mind that case fatality rates will also vary by age group and geographic areas. Government leaders and health experts have repeatedly mentioned that it is expected that COVID-19 cases would increase and that it would inevitably reach the United States. I would go even a step further to predict that there will be more confirmed cases and deaths in the United States as well as other parts of the world. Unfortunately and inevitably, by the time this editorial is published, the number of reported cases and deaths will have increased worldwide. If there is one thing to take from all of this information is that we are just at the beginning of the disease progression and more people will get infected and some additional people will also die. As a society, we need not be alarmed simply because it is a novel infectious disease. In the twentieth century, the world has experienced several novel diseases and even pandemic-level diseases. The recent CDC announcement that

COVID-19 may reach pandemic levels is not only expected but also scientifically accurate when it comes to normal disease progression. Such announcements should not surprise the public and it should also not instill panic. What the world and the United States need to do is get better prepared. I understand that the fear of the unknown can be daunting but we need to recall that we (the US and the world) have been through similar experiences and survived.

### **SOME MUCH NEEDED PERSPECTIVE**

Our public health experiences from past novel diseases and especially from similar coronaviruses such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) can help guide the response to COVID-19. With the SARS outbreak in 2002-2003, there were 8,427 reported cases with 813 reported deaths for an overall case fatality rate of 9.6 percent.<sup>2</sup> During the MERS outbreak in 2004, there were 1,392 reported cases and 538 reported deaths resulting in an overall case fatality rate was 38.6 percent.<sup>3</sup> Even with these high fatality rates, SARS and MERS never reached pandemic levels.

In the last century, we have had various pandemics throughout the world including: the 1918 influenza which infected over 500 million worldwide and caused an estimated 50 million deaths<sup>4</sup>; the Asian flu of 1957 (H2N2) which caused an estimated

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1.1 million deaths worldwide and 116,000 deaths in the United States<sup>5</sup>; the Hong Kong flu of 1968 (H3N2) which caused an estimated 1 million deaths worldwide and 100,000 deaths in the USA<sup>6</sup>; and most recently, the 2009 H1N1 pandemic which also started as a novel influenza and eventually tapered down with over 60 million people infected and an estimated 13,000 deaths resulting in a 0.02 percent case fatality rate.<sup>7</sup> Now, H1N1 is part of the routine seasonal influenza outbreaks. Even if we recall the recent 2014 Ebola outbreak with an overall case fatality rate of 39.3 percent from 28,000 reported infections and 11,000 deaths, it also never reached pandemic levels because the mode of transmission is very different than influenza or COVID-19.<sup>8</sup>

From a public health and infectious diseases perspective, there will always be vulnerable persons who are more susceptible to illness. Usually the more susceptible persons are immunocompromised or have chronic underlying health conditions. Sometimes it is the very young or the very old, and sometimes it is both or neither. Comparatively speaking, for the seasonal influenza period 2019 to present, the CDC estimates that there have been 32 million infections with an estimated 18,000 deaths in the United States.<sup>9</sup>

#### **BEST PRACTICES REGARDING PREPAREDNESS**

The emergence of COVID-19 serves to remind all of us across the different disciplines that we always need to be prepared by following an all-hazards approach. The ongoing importance of public and private partnerships cannot be emphasized enough. We will get through COVID-19 by implementing good communication, collaboration, cooperation and coordination. Healthcare systems have routinely prepared for these types of incidents. I recall during my tenure as director of emergency management at a large academic medical center in New York City, we regularly conducted infectious diseases screening drills and exercises to constantly reinforce the training with staff. These practices are still in place but they just call them “mystery patient” drills.

Part of our pandemic preparedness efforts should include: 1) establishing triggers for the activation and termination of your emergency plan; 2) reviewing

possible impacts from the pandemic on your overall operations; 3) implementing strategies that allow for social distancing and telecommuting for work and/or school if logistically possible; 4) ensuring that your organization has established policies that allow for alternate worksites or flexible schedules; 5) updating your contact lists; and 6) developing communication strategies to ensure that information flow can be bidirectional. Such practices are just a few ways that we can all perform in order to be better prepared and thereby reduce the possibility of transmission at the workplace. What we need to focus on is preventing community transmission because we will not be able to eliminate COVID-19 at this time.

During the 2009 H1N1 outbreak, many hospitals provided care to a large number of persons who thought they had H1N1 but really did not. As a result, emergency departments all over NYC and the country experienced significant increases in daily emergency department visits. For example, a hospital which normally saw a daily average of 150 patients increased to 250-300 patients. Even if the persons did not actually have the specific disease of concern, they will unnecessarily use up healthcare resources.

As with many infectious diseases, good hand hygiene is paramount in preventing infection from COVID-19 and other more likely diseases such as seasonal influenza. It is important to emphasize that by reinforcing good hand hygiene and proper cough/sneeze etiquette (ie coughing/sneezing into tissues and if not available, the inside of your elbow), a significant amount of prevention can take place. At this time, persons are much more likely to get the seasonal influenza than COVID-19. For that reason alone, it is a good idea to get the influenza vaccine if you have not yet received one.<sup>10</sup>

#### **NEXT STEPS REGARDING COVID-19**

Some people may ask why the United States has not yet produced a vaccine or when will tests be more readily available to the states. For those of us in the field of public health, we need to increase awareness that the production of a suitable vaccine takes considerable time, effort and monies. As a result, I do not realistically anticipate a viable vaccine for COVID-19

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until 2021. The CDC has already announced that tests will soon be available at the state level. As an example, New York State is now available to conduct its own testing thereby significantly reducing waiting time down to hours.

The predictable economic impact of COVID-19 serves as warning sign to encourage and promote a review of our emergency preparedness plans start those conversations for different strategies to ensure sustained operations through activities such social distancing, telecommuting and less physical contact such as handshaking. We have already witnessed the stock markets as they have declined at the end of February 2020. Such trends are expected with largescale disease outbreaks but so is the bounce back which we have already witnessed in the first week of March.

#### **CLOSING REMARKS**

As COVID-19 moves toward the pandemic phase, we need to continue to get prepared in order to prevent sustained transmission among the general public. Preparedness transcends all communities and socioeconomic classes. We need to apply our preparedness savvy to ourselves, our families and our businesses. Whether it is updating our personal plans and go bags, or communicating with our families about what to do in a large-scale disaster or how our business can be more proactive and flexible if the conditions warrant it. Let us not forget the mental health consequences throughout our communities during these difficult times. Whether at home or at work, we must include good mental health strategies for coping with these types of incidents. Ironically, the COVID-19 encourages social distancing in order to prevent transmission but we will need to collaborate and work more closely together irrespective of different beliefs in order to prevent its spread. So even though the best strategy requires us to keep our distance, it will ironically require us to “come together” to effectively combat it. Remember to stay calm, determined and just be prepared.

As emergency managers, we now have the opportunity to stand out as a beacon to other industries and lead by example. We need to take the responsibility to raise the public’s awareness regarding what all this information really means to them. We need to calm their fears and lower their anxiety levels. We have to prepare them for the slow and steady approach rather than a sprint. We as emergency managers need to gain the public’s trust and reassure them that we will get through COVID-19.

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