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COMMUNICATION PLANNING FOR THE COMING PANDEMIC

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Communication Planning for the Coming Pandemic

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This brief is based on the writings of Robert C. Chandler, Ph.D.

Learn more about Dr. Chandler here.

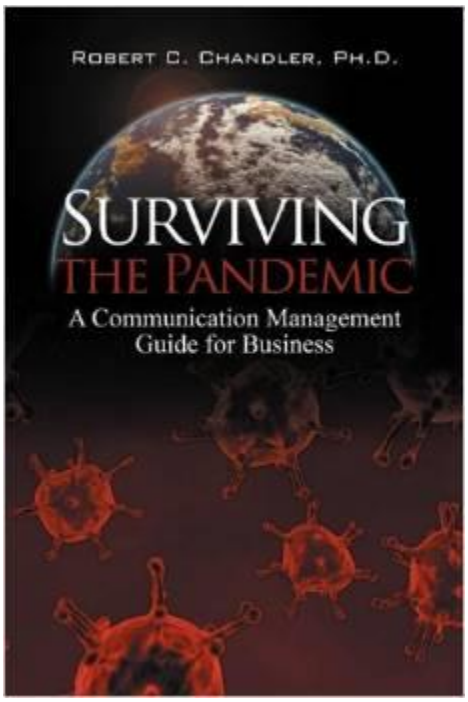
Please contact Firestorm to schedule a conversation or exercise with Dr. Chandler to enhance your organization's crisis communication preparedness.

One recent tragic headline reported the sad and seemingly unimaginable death of an otherwise healthy 16-year old in northern Colorado due to septicemic plague. My heart goes out to the family and friends of that young man at this devastating personal loss. I extend my sympathy to this devastated family. This sad report reminds us that there is a persistent risk from rare and deadly pathogens that have stalked humans throughout history.

Cindy Boren writing in The Washington Post (16-year-old Colorado athlete dies from rare form of plague) notes that in this case the Larimer County (Colorado) Department of Health and Environment is coordinating the investigation of the case, which includes experts from the U.S. Centers for Disease Control (CDC), the Colorado State Health Department, as well as the county coroner's office. Boren reports that health officials asked that anyone who visited the family's home or attended the scattering of his ashes on the family's property before the cause of death was determined seek medical attention if they subsequently developed a fever. Instances of plague among people remain rare and direct human-to-human transmission is not a risk since fleas on rodents (either living or dead) transmit plague. Boren quoting the CDC noted that an average of only seven human plague cases are reported each year in the US, with most occurring in New Mexico, Arizona, Colorado, California, Oregon and Nevada. Just contemplating a fatality from "plague" makes one somber and somewhat frightened. Perhaps that is due, at least in part, to the fearful human history with previous great plague pandemics.

Time.com has a summary of the ***ten worst pandemics*** in human history – of which the plague claims three of the top "worst" spots on the list. Those writers report the world's first great plague pandemic sweep across the Byzantine Empire around 540 CE after originating with fleas on rats in Egypt and hitchhiked with grain shipped around the empire. Contemporary historians report that 5,000 people died daily in Constantinople eventually killing more than one-half of the city's total population. The pandemic spread in all directions from there leading to somewhere between 25 million to 100 million deaths in Europe and Asia over the next five decades. The second great plague pandemic between 1347 CE and 1351 CE (bubonic plague or the Black Death) swept across Europe and some of Asia traveling with fleas on rats that were hiding with grain transported by traders. That plague pandemic may have

killed up to two-thirds of the population of Europe and would periodically recur in a series of outbreaks for several centuries further. The third great plague pandemic originated in China beginning in the middle of the 1800s. Given the increased efficiencies in transportation and shipping, that plague outbreak quickly became a global pandemic. The third great plague pandemic claimed more than 12 million lives. The fourth great plague pandemic has not yet broken out.



Plague is not the only infection on the list for human history's top pandemics. As early as 430 BCE a pandemic emerged from the horn of Africa and eventually devastated the empire of Athens. The infection agent is unknown but may have been typhoid, typhus fever, smallpox or even anthrax. What is known however is that the human toll as well as economic, social and military losses were staggeringly great. In recent centuries, epidemics and pandemics have recurred on a periodic basis. During the 1870s and 1880s, the yellow fever pandemic in the Mississippi River Valley in the south central US ranging from New Orleans to Memphis claimed more than 20,000 victims. Around 1916 and continuing for decades, the polio epidemic killed (as high as a 25% fatality rate) or maimed tens of thousands of individuals in the US. A smallpox epidemic on the Indian sub-continent killed more than 20,000 during the 1970s. Even in recent years, the threat of pandemic influenza, SARS, MERS, Ebola and other viral infections remains a serious concern. A quick search of headlines regarding epidemic and pandemic threats finds a lengthy list of potential pathogens. Most of us recall the H1N1, SARS and other recent looming threats. Currently a MERS epidemic in South Korea is threatening to overwhelm that country's ability to contain the outbreak, be transparent with the public and raises concerns about the lack of crisis management communication preparedness for public health threats.

Many of us have become somewhat complacent about the risks because some of these have not been the "worst case" scenarios. I believe that it is somewhat foolhardy to dismiss the warnings about the coming pandemic merely because we do not know which infectious agent will be the center point for the next outbreak. One pandemic threat that does not get as much attention as the headline-grabbing agents is an ancient disease villain in human history – cholera.

Cholera has co-existed on this planet with humans for a long time. Cholera is an acute intestinal infection caused by ingestion of food or water contaminated with the bacterium Vibrio cholerae. It has a short incubation period, from less than one day to five days, and produces an enterotoxin that causes vomiting and a copious, painless, watery diarrhea that can quickly lead to severe dehydration and death if treatment is not promptly given. (Cholera WHO) Cholera remains rare in the United States and other industrialized nations. However, globally, cholera cases have increased steadily since 2005 and the infection still occurs in many places including Africa, Southeast Asia, and Haiti. (Cholera - Vibrio cholerae infection)

The planet's first cholera pandemic was the "Asiatic cholera" outbreak in the early 1800s. It was the first of what would be seven global cholera pandemics (Cholera's seven pandemics). The second cholera

pandemic occurred between 1829–1851; the third cholera pandemic occurred between 1852–1860; the fourth cholera pandemic occurred between 1863–1875; the fifth cholera pandemic occurred between 1881–1896; the sixth cholera pandemic occurred between 1899–1923: and the seventh cholera pandemic occurred between 1961–1975. What is of concern is that since 1975 and continuing to the present day there have been significant cholera outbreaks, each with the potential to trigger an epidemic or even another global pandemic. There is a localized cholera outbreak currently occurring in West Africa that began in 2014 but has not received much attention due to the focus on the Ebola outbreak in the same region. Given current and historical conditions there remains the risk for another cholera pandemic outbreak. However, it seems that planetary environmental changes associated with "global warning" may actually be increasing the likelihood for another global cholera pandemic.

Jason Tetro, writing in Popular Science, (The Looming 8th Pandemic – Climate Change and Cholera) links global climate changes to an increased risk of another ("the eighth cholera pandemic") worldwide cholera pandemic. Tetro reports the findings of a recently released study (begun in 2012) that he summarized with the following:

> *"[Researchers] developed a global map where cholera may be able to live currently as well as into the future. Based on the findings, there is every reason to believe we are on the verge of another pandemic and this time, even North America may see a return. The team used 12 environmental variables attained from an existing marine dataset called Bio-ORACLE. These included climate-associated factors such as sea surface temperature, sunlight, and levels of microbial growth. The others focused on physical attributes such as salinity, pH, dissolved oxygen, nitrate and phosphate levels. From there, they examined regions known to have cholera growth. From this analysis, they were able to define a list of parameters necessary to harbor, grow and spread the bacteria. At this point, the team went looking at other areas around the world for similar environmental conditions. Using statistical analysis, they were able to determine suitability as a percentage. The most likely places had at least a 50% chance of allowing enough growth to cause an outbreak. They performed this for current climactic conditions and for the year 2100. Although the authors expected to find more than a few places where cholera could survive, the data showed an almost-global distribution of environments prime for growth. These included expected areas such as Peru, Ecuador, West Africa and parts of Australia. But some regions were completely unexpected such as the North Sea, regions south of the Scandinavian countries. In the American context, the Gulf of Mexico and the entire East Coast of America would also be prime spots for cholera to grow. As for the year 2100, the situation was dramatically worse thanks to climate change. Some of the most northern regions of the world, including the Pacific Northwest, Hudson's Bay in Canada, the west coast of Ireland, and the northern tip of Russia all could support cholera. The Southern hemisphere also would suffer although not as much. Temperatures played a more significant role in this case but still required other climate-change-related factors to ensure survival…..The results of the study reveal we are already in a position for another cholera pandemic. The locations are just waiting for the bacterium to invade and conquer. Although the likelihood of this occurring is minimal, for public health officials, knowing these regions exist is at least an early-warning system."*

Based on this reported research, the next pandemic, aided by climatic change, might be another of humanity's bouts with cholera. At the very least, these findings, indicate that an eighth cholera pandemic is something that we should anticipate as we consider the entire range of health threats and risks. In any event, complacency is not a due diligent option. There is sufficient evidence that we should

prepare for another battle between humanity and a pandemic pathogen. If human history is any guide to the future, there will be other pandemics. While we do not know whether the next pandemic will be cholera (or influenza or Ebola or something else entirely) it is reasonable to assume that there will be other pandemics. While we do not know, exactly when the next pandemic will break out it is reasonable to assume that it will at some point. There is a persistent risk from rare and deadly diseases that have stalked humans throughout history. We should not be lulled into a sense of false complacency. The key is to pay attention to the early warning signs and prepare to prevent, avoid, mitigate and survive when the next pandemic occurs.

Obviously, public agencies and public health officials have communication planning priorities. What may be less obvious is that a pandemic will disrupt supply chains, transportation, infrastructure, business travel, and result in high rates of absenteeism and loss of workforce. In some sectors, (e.g. healthcare, education, public events, marketplaces, etc.) the negative effects from a pandemic will be particularly disruptive with surges followed by stagnation periods. The preparation for the coming pandemic includes the critical aspects related to communication planning for pandemics. No matter your business sector, public or private you need to develop communication plans and capacity to help both your people and your operations survive the coming pandemic.

Luckily, there are a number of resources and options (including comic art) to assist everyone in every situation to be better prepared for the coming pandemic – whatever and whenever it strikes. In doing so, we can hopefully prevent or reduce the number of heartbreaking personal (human health and safety) and business operations losses that inevitably occur with such outbreaks.

To learn more about Pandemic Planning for your organization, visit here.

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About Dr. Chandler

Dr. Robert C. Chandler, (Ph.D., University of Kansas; M. A. Wake Forest University; B. A. Harding College) is a leading research authority on communication during crisis and disaster events.

His research spans the range of crisis communication, leadership, teamwork, decision making, psychometric variables during crises and emergency communication including specific areas of crisis and incident notification, warning messages, cognitive processing & message comprehension.

He also investigates organizational communication, communication and conflict; risk communication, multicultural and intercultural communication issues and business ethics). He is the creator of several widely used planning models for crisis and emergency communication preparedness, including: (1) Communication Planning for the Six Stages of Crisis, (2) the 3-3-30© principle for incident notification, and (3) Message Mapping: The Chandler Model.

Dr. Chandler is an internationally recognized social scientific researcher with more than 150 academic and professional papers, including widely circulated white papers on emergency and crisis communication. He has authored more than 75 academic and professional publications, and is the author or co-author of eight books including: Emergency Notification (2010); Surviving the Pandemic: A Communication Management Guide for Business (2009); Media Relations (2008); Disaster Recovery and the News Media (2007); Managing the Risks for Corporate Integrity: How to Survive and Ethical Misconduct Disaster (2006); Pandemic: Business Continuity Planning Priorities for the Coming Outbreak (2005); and Crisis and Emergency Communication (2006).

More information about communication planning and effectiveness during the six stages of a crisis may be found in Dr. Chandler's book on Emergency Notification and on this website's blog

Chandler, R. C. (2010) Emergency Notification. PRAEGER Publishers (PSI Business Security Series). ISBN-10: 0313365873 or ISBN-13: 978-0313365874. This title is available from Amazon.Com and other booksellers.

Visit Dr. Chandler's website at http://www.drrobertchandler.com/