RESEARCH QUESTIONS FOR ASPA/SECM TASK FORCE ON PANDEMICS

by Lew Toulmin, 9 April 2020

This paper presents possible research questions for a Pandemic Task Force and after-action report(s) or papers of the American Society for Public Administration Section on Emergency and Crisis Management (ASPA/SECM). These research questions are divided in two main sections: factual questions, and analytical questions – these latter are arranged by (revised) phases of emergency management.

FACTUAL QUESTIONS

- 1. What was the timeline of relevant events prior to the emergence of the current Covid 19 pandemic? (For example, previous similar epidemics in the last 10-20 years; levels of organizational preparedness in the US and abroad for this type of disaster; roles over time of WHO (including the WHO Contingency Fund for Emergencies, to which the US reportedly contributed nothing for the last three years), UN, International and US Red Cross, White House/NSC Directorate for Global Health Security and Biodefense (disbanded? Demoted to a lower agency?), US Public Health Service, Department of Homeland Security and its CISA division, FEMA, USAID/OFDA, USAID Emerging Pandemic Threats Program, USAID Humanitarian Pandemic Preparedness Initiative, relevant DoD elements (e.g., US Army Medical Research Institute of Infectious Diseases, the DIA National Center for Medical Intelligence), etc.)
- 2. What was the timeline of relevant events abroad and in the US (including in US states) during this crisis?
- 3. What is the estimated number of world-wide, country-by-country and US Covid 19 infections, cases, hospitalizations, ICT intakes, intubations, deaths, lasting injuries, and other relevant health statistics? (Also state-by-state in the US.) What are the factors that could make these estimates inaccurate, and what are the likely confidence intervals? (E.g., under-counts in the US due to differing standards for Covid registration and collection, and under-counts in developing countries (and even the UK) due to lack of recognition of the correct cause, and lack of testing.)
- 4. How do the actual figures (estimated immediately above) compare to the various major models that developed forecasts for these figures? (I.e., how accurate were the forecasting models used by key decision-makers?) What was the cause of over- or under-estimates?
- 5. What was the demographic (gender, age, race, ethnic, etc.) breakdown in the US and abroad of the relevant pandemic health statistics?
- 6. What were the health statistics for any second, third and other waves of Covid outbreaks? Did the virus mutate and if so, how, and what were the effects?
- 7. What was the timeline, actors and efficacy of any therapeutic medicines, vaccines, and other similar measures?
- 8. What is the estimated direct out-of-pocket cost world-wide for expenditures on responding to the Covid virus? What were the US and world-wide stock market losses? What other measures of economic loss are available? How do these losses and costs compare to other major disasters?
- 9. Etc.

ANALYTICAL QUESTIONS BY PHASE

The usual emergency phase sequence is: mitigation, preparedness, response and recovery. This is modified below somewhat, to reflect the particular nature and medical terminology of this type of crisis. Also at the end is a section added on forecast long term effects of this virus and crisis.

Prevention Phase

- 1. What was the origin of Covid 19? (There are at least three theories at present, but all theories seem to involve bats in Wuhan, China.)
- 2. Was the origination totally (or likely, or not) preventable? Are similar outbreaks in the future preventable? If preventable or likely preventable, what measures could be taken in future to maximize the likelihood of prevention? (E.g. prioritizing diplomatic, trade, law enforcement, regulation and other efforts to eliminate "wet markets" in China and "bush meat" consumption in West Africa and elsewhere, and to eliminate or reduce interaction between humans and bats (a known reservoir of hundreds of viruses), pangolins, monkeys, and other virus carriers.)
- 3. In the 1940s and '50s the Royal Thai Government successfully reduced the use of betel nut very substantially in that country, using a combination of education, refusal of government services to users, and Royal and Prime Ministerial actions. With its authoritarian government, could the Chinese do the same with bat and pangolin and other relevant consumption and interaction? What is the Chinese government doing now re this problem?
- 4. What intelligence collection, analysis, transmission and reception problems occurred during the crisis at the Chinese, US and international levels?
- 5. How did actions during this phase compare with international best practices (IBP), US vs. other countries, and in previous similar crises?
- 6. What could birth control and population reduction programs around the world do to reduce the likelihood of animal to human virus transmission, by reducing population pressures on wilderness area edges?
- 7. Etc.

Preparedness Phase

- 1. What was the focus and capacity of relevant US intelligence-gathering and -analytical organizations (e.g. the organizations mentioned above, and also CIA and the DoS Bureau of Intelligence and Research), at the time of the Covid outbreak, and was it sufficient to detect, collect, analyze, transmit and disseminate relevant information?
- 2. What was the state of preparedness at the US state and Federal levels (by relevant agency, e.g. the Department of Homeland Security, the US Army Corps of Engineers, etc.) for this crisis? At the international, donor and NGO level?
- 3. What surge capacity was available in the US at the Federal level, state level, and among key private actors (e.g. suppliers of personal protective equipment (PPE), ventilators and other important items)
- 4. How did this state of preparedness compare to IBPs in this area?
- 5. What were the qualifications of the key actors in the Federal emergency management apparatus at the agency and White House levels, at the start of the crisis?
- 6. How many vacancies and "acting" positions were there in this apparatus?

- 7. What relevant documentation (plans, manuals, binders and related) were in place and available to decision-makers at the time of the outbreak, how comprehensive and widely disseminated were they, and were they in final, approved form?
- 8. What drills, table-top exercises, simulations, training efforts and related had been undertaken in the period shortly before the outbreak? During the time of handover from the Obama to the Trump Administrations?
- 9. How prepared was the US public health community to do very extensive containment and tracing of infected carriers?
- 10. What was the status and contents of the National Stockpile at the beginning of the crisis?
- 11. Etc.

Containment and Tracing Phase

- 1. What specific memos, reports, warnings, cables, emails, briefings or other communications were given, by whom to whom, in the early days of the outbreak, and what was the response?
- 2. Were travel bans from other countries effective in reducing or stopping the "seeding" of the US directly or indirectly from the point of origin?
- 3. What activities in the area of containment and tracing of infected persons were undertaken in the US at the national and state levels? Were these efforts overwhelmed by "seeding" from China, Europe and elsewhere?
- 4. How did actions during this phase compare with international best practices (IBP), US vs. other countries, and in previous similar crises? (E.g., it is reported that visitors arriving in Taiwan during this Covid phase had their temperatures taken, relevant medical histories taken, shoes disinfected, luggage disinfected, were transported in specially cleaned government supplied taxis to their hotels, and were provided with several phone apps which provided the nearest locations for buying masks and other supplies, the locations of all infected persons, and other virus-related information.)
- 5. Was it possible for the US (like South Korea and Taiwan) to have limited spread of the virus, such that vigorous containment, quarantine and tracing could have taken place, rather than wide "community spread"? If so, is it possible to reasonably estimate the difference in loss of life and treasure between that scenario and the actual scenario that played out? What is that difference?
- 6. Etc.

Mitigation/Response Phase

- 1. It has been reported in the media that the US "wasted 1-2 months or more" in responding to this crisis. What is the evidence re these reports?
- 2. What actions in mitigation and response to the Covid crisis were undertaken in the US at the national and state-by-state levels?
- 3. The oft-repeated goal of the Administration and the states during the crisis was to "flatten the curve" of infections, to not overload the health care system. How well did this work?
- 4. Critics have stated that not having a national stay at home order or strong recommendation from the White House was a major problem. What is the evidence re this criticism?

- 5. Various states implemented stay at home and other measures at different times. What effect did early vs. late implementation have on death rates and other measures? On retention of precrisis levels of economic activity?
- 6. What was the role, successes and problems encountered of the US Army Corps of Engineers in the response effort? Was the Corps mobilized too late, and if so, why?
- 7. Media coverage of disaster response often focuses only on a few high profile organizations, such as the Corps of Engineers, Red Cross, US Coast Guard, etc. In fact in almost all disasters an enormous number of private firms, NGOs, religious groups, and spontaneous groups respond but get little attention. What is a reasonably accurate list of these groups that responded in the Covid crisis, and what were there major contributions?
- 8. Covid reportedly had a disproportionate effect on minority communities, especially African-Americans. What is the evidence re this effect? What were the causes?
- 9. What was the impact on prison populations? On Indian reservations and populations? On other confined locations such as military bases and cruise ships like the *Diamond Princess, Zaandam, Rotterdam, Celebrity Infinity, Ruby Princess* (possible Covid criminal liability) and *Greg Mortimer* (60% infected)?
- 10. What was done to communicate national and state Covid policies with minority, non-English speaking, immigrant, handicapped, homeless and other hard to reach communities?
- 11. The President cited the US Constitution in justifying his refusal to direct the states (or strongly jawbone, or withhold funds conditional upon compliance) to have stay at home and other measures. In fact, what are the powers of the President during an emergency under the Constitution and existing laws? Do these need to be strengthened, weakened, or clarified?
- 12. How did actions during this phase compare with international best practices (IBP), US vs. other countries, and in previous similar crises? A very few countries (e.g. Vanuatu) of the 196 on Earth apparently have no Covid cases at all; how was this achieved?
- 13. What economic and stimulus programs were launched to respond to the crisis? What were the successes and failures in meeting program goals? What impact did these have on the US national debt levels?
- 14. The Small Business Administration was asked to hugely increase its output due to the crisis. The SBA has a reputation for being rather slow to process loans and undertake new efforts; how did it fare in this crisis? Was the policy choice to rely heavily on this agency a wise one?
- 15. The Covid crisis ties into the on-going public administration debate re politics vs. administration. In this instance the President and White House were severely criticized for not following the recommendations of scientific experts. What is the evidence re this criticism? If justified, how can future crises have political and administrative leadership be better integrated, with scientific experts having more of a role in actual decision-making?
- 16. One of the few major disasters that is generally viewed as having been well managed is the 1964 Anchorage, Alaska earthquake response, in which a well-regarded public administrator was appointed as the "Tzar" of the effort, and achieved a tremendous amount in a few months. Should this have been the model for the Covid crisis?
- 17. What was the structure, personnel, qualifications, processes, accomplishments and failures (if any) of the White House Coronavirus Task Force? How did this task force interact with line agencies?

- 18. How was the National Stockpile administered during the crisis? What resources did it have?

 Was the Federal government sourcing key materials in competition with the states, thus driving up prices and creating confusion, as alleged by critics? Did the Federal sourcing just feed expensive materials into the private supply chain, thus adding cost and delay, rather than simply buying the materials and delivering the goods to the hospitals and facilities in most need?
- 19. The 2008-9 financial crisis response was criticized for lack of transparency, lack of accountability, resulting in corporate bonuses, lack of prosecution of apparently fraudulent transactions, funds used for stock buybacks, and other problems. How did the Covid crisis fare in these regards?
- 20. Crises often lead to fraud, waste and abuse of government resources and violation of the laws related to stock sales, insider trading, price gouging, procurement fraud, favoritism, cronyism, etc. What was the situation during the Covid crisis in this regard?
- 21. What ethical issues arose during the crisis, how were these dealt with, and what lessons were learned for the future?
- 22. What was the role, qualifications, efforts, accomplishments and failures of the Covid response Inspector General during the crisis? Of other relevant Inspectors General? Of any Congressionally mandated oversight and decision-making committee or board?
- 23. What was the effect of the virus on national security in terms of warfighting capacity of key DoD elements (e.g. the USN's 11 Carrier Strike Groups -- how many were affected besides the USS *Theodore Roosevelt*?)
- 24. NS/EP (national security/emergency preparedness) communications and telecommunications tend to be over-loaded in a crisis, and one study estimated that communications in a disaster increase by more than the square of the number of organizations responding. What was the communications and telecoms situation during the Covid crisis?
- 25. The former National [emergency] Communications System, its functions, and its National Security Telecommunications Advisory Committee (NSTAC) (the most expensive Presidential advisory committee) were absorbed by the Department of Homeland Security's CISA agency in 2012. What was the role, accomplishments and problems of the CISA and these functions during the Covid crisis?
- 26. Etc.

Recovery Phase

- 1. What were the state and US national actions taken re medical, economic and societal recovery?
- 2. Did some or all of these actions result in renewed spikes in Covid infections?
- 3. How were new spikes caused by "seeding" from overseas, lagging hotspots, such as Africa and LAC, prevented or handled?
- 4. What efforts were undertaken to move to detailed containment, quarantine and tracing prior to and during the recovery phase? Were these state-led or Federally led? How successful were these?
- 5. How did actions during this phase compare with international best practices (IBP), US vs. other countries, and in previous similar crises? (E.g., Wuhan is now re-opening but with three color codes (green for unlimited, yellow for possibly exposed to an infected person, red for infected) which regulate travel for each person in the province.)
- 6. The phase 3 stimulus package approved by Congress was about 2 trillion USD. But the Federal Reserve undertook a much larger, 4 trillion USD lending package that is almost unknown to the

- US public, has very little oversight, no Congressional involvement, and is quite unusual in that it apparently is involving loans directly to US firms, not to banks. What are the legal authorities for this program, the goals, the accomplishments, the problems, the reporting, and the transparency of this effort?
- 7. The various "stimulus" packages were in fact stopgap packages, primarily designed to pay people and companies while they were not working or producing goods and services. As such, they should create inflation, since more money chases fewer goods. Did this occur? If inflation threatened, how was it wrung out of the economy? Did those measures disproportionately affect working people rather than the wealthy?
- 8. What "after-action reports" by various Federal and state agencies were produced, and what did they conclude?
- 9. Etc.

Forecast Long Term Effects

Assuming that ASPA/SECM Task Force reports are written in early- to mid-2021 and later, what long term effects can be reasonably forecast at that point in terms of:

- 1. Changes in industries (e.g. possible permanent weakening of the movie and travel industries)?
- 2. Changes in the strength or weakness of private and public labor unions?
- 3. Changes in social habits (e.g. possible disappearance of handshaking, near universal wearing of masks, etc.)?
- 4. Changes in institutions (e.g. possible decline of classroom instruction in favor of on-line instruction; or the rise of super-expert, talented and highly paid on-line instructors, as has already happened in South Korea)?
- 5. Impact of massively increased US debt load?
- 6. Successful clawing back of industries previously outsourced to China, Vietnam and other low cost locations?
- 7. Changes in diplomatic relations with key foreign powers?
- 8. Decline of "just in time" manufacturing?
- 9. Strengthening of preparedness in relevant US pandemic crisis management institutions?
- 10. Forecasting, prevention, and mitigation of the next pandemic?
- 11. Etc.