RUSI
www.rusi.org

Royal United Services Institute
for Defence and Security Studies

MSB
Swedish Civil Contingencies Agency

Key Issues Report

Revamping Crisis Resilience and Security in the Post-Pandemic World

Edited by Elisabeth Braw

Revamping Crisis Resilience and Security in the Post-Pandemic World

Edited by Elisabeth Braw

Key Issues Report, June 2020

RUSI
www.rusi.org

Royal United Services Institute
for Defence and Security Studies

MSB
Swedish Civil Contingencies Agency

189 years of independent thinking on defence and security

The Royal United Services Institute (RUSI) is the world's oldest and the UK's leading defence and security think tank. Its mission is to inform, influence and enhance public debate on a safer and more stable world. RUSI is a research-led institute, producing independent, practical and innovative analysis to address today's complex challenges.

Since its foundation in 1831, RUSI has relied on its members to support its activities. Together with revenue from research, publications and conferences, RUSI has sustained its political independence for 189 years.

The views expressed in this publication are those of the authors, and do not reflect the views of RUSI, the MSB or those participating at the conference.

Published in 2020 by the Royal United Services Institute for Defence and Security Studies.

This work is licensed under a Creative Commons Attribution – Non-Commercial – No-Derivatives 4.0 International Licence. For more information, see <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

Key Issues Report, June 2020.

Royal United Services Institute
for Defence and Security Studies
Whitehall
London SW1A 2ET
United Kingdom
+44 (0)20 7747 2600
www.rusi.org
RUSI is a registered charity (No. 210639)

Contents

Foreword v
Dan Eliasson

Introduction 1
Elisabeth Braw

Section 1: Report on Conference Proceedings and Key Issues 3

Looking Ahead: Revamping Resilience and Security in a Post-Pandemic World 5
Elisabeth Braw

Resilience: Medical, Societal, Industrial 6
Democratic Challenges and Opportunities 7
Vulnerabilities in Supply Chains 8
Public–Private Partnerships 10
Digitalisation and Cyber Security 11
Disinformation and Misinformation 12
International Cooperation and Coordination 13

Section 2: Commentaries 15

The Brave New Post-Covid World 17
Michael Chertoff

The Coronavirus Pandemic: An Opportunity for Democratic Renewal 19
Kevin Casas-Zamora

Lessons from the Coronavirus Crisis: The Medical Perspective 23
Tom Inglesby

Preparing for Hazards: What We Can Learn from the UK's Experience of Combating the Coronavirus Pandemic 25
Pauline Neville-Jones

The Future of Emergency Management after the Coronavirus Pandemic 27
Craig Fugate

About the Editor 29

Foreword

THE WORLD IS still in the midst of managing the coronavirus pandemic. The crisis will continue to affect our health, daily lives and the world economy for a considerable time and have major consequences for our societies. The Swedish Civil Contingencies Agency (MSB) has a broad mandate to prevent, prepare and respond to crises and catastrophes within Sweden and abroad.

To address which lessons can be learnt from the pandemic, on 19 May 2020, the MSB and RUSI convened leading thinkers from Europe and beyond to discuss 'Revamping Crisis Resilience and Security in the Post-Pandemic World'. In our discussions we identified some of the shifts and long-term impacts that we can see at this stage of the crisis. We also explored some of the key actions that governments, organisations and citizens should consider as we emerge from the most acute phase of the pandemic and enter a post-pandemic era.

Even though the pandemic is far from over, we will eventually reach a situation where Covid-19 is brought under reasonable control and we settle into a 'new normal'. The key question is what this new normal will look like. One thing is for certain, it will be a world heavily impacted by the loss of lives and the economic consequences of the shutdown. But what other consequences can we expect from this crisis?

The MSB has been tasked by the Swedish government to build crisis resilience and reduce vulnerabilities on a whole-of-society basis. The results from this conference will provide helpful insights as we continue to develop our work. I hope that this report will be useful to others as well, both within Sweden and internationally. I also hope that it will contribute to the important debate on how we can all be better prepared to face future crises, whether they be a pandemic like Covid-19 or crises of a completely different kind.

Dan Eliasson, Director General, the Swedish Civil Contingencies Agency (MSB)

Introduction

Elisabeth Braw

THIS REPORT EMERGES from the 'Revamping Crisis Resilience and Security in the Post-Pandemic World' conference held on 19 May 2020. Our intention is for it to be used as a resource and source of ideas for resilience and crisis planning officials not just in Sweden but in other countries as well.

The report is structured in two sections. The first addresses the major themes of the conference and provides additional context on how these fit into broader debates about resilience. While not presenting new research, this section highlights the key issues that are often absent from the current discussion on the coronavirus pandemic. It further suggests the major lessons that policymakers should take from the pandemic and indicates policy areas that require specific attention so that future crises will be more effectively addressed.

The second section delves specifically into some of these policy areas. It features shorter contributions from some of the speakers at the conference. In these, the authors distil the key messages presented at the conference relating to each speaker's area of expertise. In doing so, many of the authors offer novel ideas that merit further consideration.

This work will, it is hoped, generate new discussions among those involved in contingencies planning – both in the public and private sectors – and encourage them to consider solutions that go beyond their traditional remits. In turn, this should lead to more-resilient societies, capable of facing a range of contingencies.

Section 1: Report on Conference Proceedings and Key Issues

Looking Ahead: Revamping Resilience and Security in a Post-Pandemic World

Elisabeth Braw

MSB DIRECTOR-GENERAL DAN Eliasson delivered introductory remarks. His comments were followed by presentations from eight speakers representing different areas of expertise: preparedness and disaster management; medical and pandemic planning; safeguarding of democracy; government and security; insurance; social media; and international cooperation.

The speakers were:

- Michael Chertoff, Co-founder and Executive Chairman, Chertoff Group; and former US Secretary of Homeland Security (keynote).
- Tom Inglesby MD, Director, Johns Hopkins Center for Health Security.
- Dr Kevin Casas-Zamora, Secretary-General, International Institute for Democracy and Electoral Assistance (International IDEA).
- Baroness (Pauline) Neville-Jones, House of Lords and former Minister of State for Security and Counter Terrorism.
- Nathaniel Gleicher, Head of Cybersecurity Policy, Facebook.
- Craig Fugate, Chief Emergency Management Officer, One Concern; former Administrator, US Federal Emergency Management Agency.
- James Vickers, Chairman, Willis Re International.
- Marina Kaljurand, former Foreign Minister of Estonia, Member of the European Parliament.

Each speaker presented lessons learnt from the coronavirus crisis and assessed the long-term impacts of the crisis, especially as they relate to resilience and contingency planning. They also explored some of the key actions that governments, organisations and citizens should consider as societies emerge from the most acute phase of the pandemic and eventually enter a post-pandemic era. Their presentations and the following discussion fell into seven different areas:

- Resilience: medical, societal, industrial.
- Democratic challenges and opportunities.
- Vulnerabilities in supply chains.
- Public–private partnerships.
- Digitalisation and cyber security.
- Disinformation and misinformation.
- International cooperation and coordination.

Naturally, these areas do not exist in isolation; on the contrary, in the coronavirus crisis, as in other crises, aspects overlap.

Resilience: Medical, Societal, Industrial

Responsibilities and Legal Frameworks

Resilience usually ranks as the most important aspect in any preparedness and crisis planning, and indeed in the response. As Inglesby pointed out, 'pandemics affect the entire society. Therefore, we need resilience across the whole society. The whole society has a role to play in preparing for and responding to crises'. Indeed, as he noted, pandemics should no longer be treated as low-probability, high-consequence events. In the short-term, pandemics have an uncertain probability with high consequences, and in the long-term they are high-probability events. Chertoff, in turn, noted that 'businesses must change too and become more resilient. Resilience and redundancy will have to become part of business responsibility. Shareholders or government regulations may push for such precaution'.

The obvious challenge is that resilience is hard – or even impossible – to quantify: what constitutes a resilient society? Which criteria have to be met, under which conditions? And who should meet the criteria? If resilience becomes part of business responsibility, as Chertoff suggested it should, would it be on a self-regulatory basis, and should it be legally mandated and reported to the government? How can and should business resilience be measured? In addition, should governments create new regulatory agencies tasked with monitoring business resilience? Should the wider public be expected to meet resilience standards, and if so, how should this be monitored? Neville-Jones went some way towards answering this question, arguing that countries 'need resilience by design, and the legal measures should be proportionate and agreed on by the population'.

However, the challenge remains and has, if anything, become even more urgent in the wake of the coronavirus crisis: countries need to be more resilient, yet there is no agreement on what constitutes an appropriate level of resilience. Nor is there agreement on which parts of society should be expected to be resilient. The traditional matrix in which a low-probability, high-consequence event was not considered a priority simply on account of its low probability likewise needs to be re-evaluated. Answers could include voluntary resilience training for parts of society, for example, teenagers during summer holidays, retirees or people out of work.

Eliasson raised the vital point of which rules apply to government and business operations during times of crisis. In most liberal democracies, one set of rules applies during peacetime and another during wartime. Wartime rules give the government significant powers, including powers over privately owned companies, but they tend to only apply to situations involving traditional war. Though countries have additional legislation for contingencies, such as the UK Civil Contingencies Act, these legal frameworks do not sufficiently cover the range of threats and risks now facing liberal democracies. In an era of increasing grey-zone warfare and more contingencies originating from the natural world (such as pandemics and extreme-weather

events), government agencies and industry need clearer rules under which to operate in crisis situations.

Democratic Challenges and Opportunities

Unrest, Protest and Emergency Powers

The state of democracy may not seem a central outcome of the coronavirus pandemic. The panellists, however, presented a different picture. Democratic challenges, several of the speakers posited, merit serious attention as countries attempt to recover from the crisis. Citizens around the world have – for the most part diligently – obeyed governments' public health instructions. Democratic governments have been held to account even as parliaments have found themselves unable to meet in their usual manner. In countries including the UK, parliamentary debates have been held via videoconference.

To safeguard democracy during times of crisis, governments should treat their citizens as partners rather than subjects. Fugate argued that national resilience is often a measure of the public's confidence in the government: if there is more confidence, an individual is more willing to act and make sacrifices that might not be in his or her own self-interest but are in the public interest. Conversely, low levels of trust translate into limited compliance with government instructions during crises. It is thus vital that governments take trust-based actions, not just for democracy but also to be able to successfully implement policies. For example, if a government instructs the public to stay at home, the public needs to be able to understand why this step is necessary. That includes providing citizens with detailed information in full transparency, communicating that the government has faith in them. Eliasson observed that 'trust has been a key component in the Swedish response to Covid-19. Voluntary advice from the government has been followed in most part because [of] the trust that the society has in the government'. Trust between government and citizens may, however, erode over time and needs to be constantly renewed.

The transparency approach – with governments providing detailed information to the public – has by and large been pursued by all the Nordic countries during the coronavirus crisis. In contrast, governments of other countries have been less forthcoming in widely sharing information with the public. As a result, people have often felt unsure of the country's course of action and their own role in it. Arguably, that approach has also created resentment towards government. YouGov's polling of citizens' attitude towards their government's handling of the coronavirus pandemic provides a potential indication of the value of transparency – it shows Denmark, Finland and Norway consistently at the top.[1] Neville-Jones rightly proposed that in future crises resembling this one, the UK should make more information publicly available.

1. YouGov, 'COVID-19: Government Handling and Confidence in Health Authorities', 17 March 2020, <https://yougov.co.uk/topics/international/articles-reports/2020/03/17/perception-government-handling-covid-19>, accessed 1 June 2020.

In many liberal democracies the coronavirus crisis has, in fact, led to two different and concurrent developments: one of solidarity among citizens and a willingness to obey government instructions, and one of distrust of authorities as lockdowns have worn on and too little information has been made available on the path out of them. As Chertoff noted, 'disinformation, which has been both intentionally and unintentionally spread, has undermined solidarity'.

Making the connection between good governance, information and citizen trust, Eliasson pointed out that information vacuums can ultimately lead to a loss of citizen trust and even to undemocratic developments. 'Well-informed citizens are needed to manage disinformation and responsiveness to crises', he said.

The coronavirus response poses another challenge. In many countries, the response has included expansion of emergency powers. 'Emergency powers are part of the arsenal of tools in democratic states. In many places, the legitimate use may go well beyond what is acceptable', Casas-Zamora noted. These are not abstract considerations. Countries have found themselves having to decide whether to postpone elections. Over 60 countries have already done so.[2] As Casas-Zamora pointed out, 'over the next months and years, the economic crisis will almost certainly cause unrest and public order challenges in many places. In these situations, states may want to continue using emergency powers and turn this into a norm'. Indeed, in the wake of the coronavirus pandemic, a number of countries including the US have experienced protests or unrest. Casas-Zamora's argument that the pandemic may present an opportunity to renegotiate the social contract and build more inclusive societies and fairer economic structures merits consideration.

Vulnerabilities in Supply Chains

From Just in Time to Just in Case

When Covid-19 struck Europe, Germany responded by banning exports of medical supplies.[3] Other countries soon followed as did the EU.[4] Though their moves seemed callous, the decisions made sense. A government's first responsibility is to look after its own population. The export ban, however, highlighted a situation that has long been both well-known and neglected: today's daily life – not just in wealthy countries – relies on significant import of components and finished goods, and on complex international supply chains. Eighty per cent of the world's trade, for example, travels by sea.[5]

2. International Institute for Democracy and Electoral Assistance (IDEA), 'Global Overview of COVID-19 Impact on Elections', 18 March 2020, <https://www.idea.int/news-media/multimedia-reports/global-overview-covid-19-impact-elections>, accessed 4 June 2020.
3. *Reuters*, 'Germany Bans Export of Medical Protection Gear Due to Coronavirus', 4 March 2020.
4. Lily Bayer, 'EU Moves to Limit Exports of Medical Equipment Outside the Bloc', *Politico*, 15 June 2020.
5. Elisabeth Braw, 'Global Supply Chains are Dangerously Easy to Snap', *Foreign Policy*, 7 August 2018.

In a pandemic, and indeed in every global crisis, countries will need access to the same critical materials at the same time. There are two issues linked to supply chains, both highlighted at the event: the security of the supply chains themselves; and whether long international supply chains are in fact desirable even if their security is improved. Chertoff raised a point that has been frequently discussed during the coronavirus pandemic: are Western companies (and, as a result, countries) too dependent on Chinese suppliers? Dependence on foreign countries, Chertoff noted, exposes Western countries to geopolitical risks; he proposed that like-minded Western democratic states should work together to foster a safe industrial base for this new normal. Fugate made a similar argument, pointing out that it is extremely difficult to reconcile efficiency with resilience. With the exception of personal protective equipment (PPE), during the current coronavirus crisis supply chains have proven rather robust. Had the crisis instead concerned food, the outcome would likely have been far more dramatic.

In learning from the coronavirus crisis, businesses will make a calculation of the increased transaction costs versus increased resilience. Liberal democracies can expect some businesses – especially global ones – to modify their supply chains, for example by moving away from single-source suppliers. Indeed, Western companies are already beginning to shift supply chains from China.[6] 'Just in time' has been replaced by 'just in case', with shorter and more diversified supply chains: for resilience, this is a desirable outcome. The challenge for liberal democracies is that their industries are almost completely privately owned. In some cases, this will not be a problem. Businesses are likely to modify supply chains for their own reasons. Without legislation, however, governments cannot force any action on companies. Legislation is effective, but it is a blunt tool that is likely to be resented by industry.

Governments can also simply appeal to companies to make their supply chains more regional or even national. The most promising approach today may be the regular consultations held by US government departments including the Department of Energy, where top executives are provided with updates about national security risks and developments.[7] Though they are under no obligation to act in the national interest, knowledge of national security risks and threats can help guide their thinking.

In the short term, to avoid the chaos created by the coronavirus pandemic, when countries competed for the same hard-to-access supplies, countries should jointly plan for contingencies, a point made by several speakers at the event.

6. Don Lee, 'As Coronavirus Cripples Global Supply Lines, More U.S. Firms Looking to Leave China', *Los Angeles Times*, 4 March 2020.
7. See, for example, Kate Marks, 'NGA Cybersecurity Roundtable on State, Federal, and Utility Energy Cybersecurity Coordination and Information Sharing', Office of Cybersecurity, Energy Security and Emergency Response, US Department of Energy, 15 August 2019.

Public–Private Partnerships

Governments Cannot Succeed Without the Private Sector

Another central theme in contingency planning, one that is likewise not new but must be made a priority, is cooperation between government and the private sector. Since the end of the Cold War, most Western European governments have radically shed government-owned companies. While this may have made financial sense, it creates significant challenges in contingency planning. With most governments no longer owning water companies, power utilities, rail operators or airlines, they can no longer easily command action by such pillars of critical national infrastructure but instead need separate agreements. Such agreements, of course, often depend on the respective company being willing to participate. In addition, in contingencies, governments also rely on services provided by a range of other companies, including manufacturers and digital firms. As Kaljurand noted, 'cybersecurity is one of the first issues where governments have understood that they cannot succeed without the private sector'. Crucially, public–private partnerships in vaccine development will also need to be strengthened, not just within countries but globally.

Another area where public–private partnership is urgently needed is insurance. One of today's most significant challenges in crisis response is insurance gaps: the gap between economic losses and insured losses. Put simply, households and businesses do not adequately insure themselves. The resulting gaps, for example, after the 2016 earthquakes in Italy, can involve billions of euros. If this gap is not closed, the resulting losses will cause delays in recovery and ultimately intervention by the government.

There are regulatory issues as well, Vickers explained. Insurance businesses function on the principle that risk can be pooled effectively: losses are incurred by the few but the costs are distributed across the many. But there are challenges for events where losses are widespread. Given the risk of more frequent extreme weather events and pandemics, the current setup of complete dependence on the market no longer works.

This is especially the case given that closing the insurance gap will involve prodding people to buy insurance and perhaps even disincentivising dangerous behaviour. People are often reluctant to think about negative prospects and often make choices detrimental to contingency planning, for example, opting to live in high-risk areas. 'The private sector cannot address it on its own, and the insurance sector needs the help of government to find a solution for future events of this kind', Vickers said, referring to pandemics. One model that has potential for disaster-insurance adaptation is Germany's health insurance model. Residents are obliged to buy health insurance, which is provided by insurers approved by the government. A range of rates and options are available, and everyone is eligible for coverage.[8]

8. Krankenkassen, 'System: So funktioniert die gesetzliche Krankenversicherung (GKV)', <https://www.krankenkassen.de/gesetzliche-krankenkassen/system-gesetzliche-krankenversicherung/>, accessed 2 June 2020.

Public–private cooperation can also be improved with national risk registers and horizon scanning. Neville-Jones suggested that governments should draw on outside expertise and 'use open-source intelligence to understand what could turn into a potential disruption instead of just using secret intelligence'. In addition, governments should adopt a broader view of what could become a source of disruption. This is an extremely important step that can only be carried out in cooperation with industry, as companies often detect new threats before governments do.

Public–private partnerships would likewise be beneficial in contingency exercises. Armed forces constantly exercise using a wide range of scenarios, and businesses conduct crisis management exercises. The armed forces and industry do, however, not conduct live exercises for grey-zone scenarios that could affect both. This area offers opportunities for rapid action.[9]

Sweden's *Total Defence Exercise 2020* – led by the Swedish Armed Forces and the MSB, and involving government agencies at the national, regional and local levels, as well as businesses and citizen volunteers – is currently underway. It is the closest existing version of grey-zone exercises involving both the armed forces, industry and civil society. Though other countries are unlikely to launch such ambitious exercises, they can draw lessons from *Total Defence Exercise 2020*.[10]

Digitalisation and Cyber Security

Technologies Developing Faster than Security Solutions

Given that the coronavirus pandemic has suddenly caused large parts of life – especially offices and education – to suddenly move online, important lessons can be learnt from the crisis in the area of digitalisation and cyber security. 'We have seen what it means to have open, free and accessible internet, and how privileged those are who can work remotely', Kaljurand said. But the pandemic has not only demonstrated the advantages of digital life but also the vulnerability it adds. 'The widening digital gap had vulnerabilities already before the coronavirus crisis; a result of technologies developing faster than security solutions. Covid-19 has highlighted these vulnerabilities', Eliasson noted.

Cyber attacks have increased along with internet use during this crisis.[11] Small businesses that have suddenly had to move large parts of their operations online are considered particularly vulnerable. In April, Interpol warned that ransomware attacks on hospitals – especially ones at the forefront of coronavirus research efforts – have increased.[12]

9. Elisabeth Braw, 'Business Must Prepare for Aggression by States', *Financial Times,* 10 August 2019.
10. Swedish Armed Forces, 'Total Defence Exercise 2020', <https://www.forsvarsmakten.se/en/activities/exercises/total-defence-exercise-2020/>, accessed 15 June 2020.
11. Andrew McCorkell, 'Impact of First 100-Days of Covid-19, Includes Volume of Attacks up 33%', *SC Magazine*, 6 May 2020.
12. Interpol, 'Cybercriminals Targeting Critical Healthcare Institutions with Ransomware', 4 April 2020.

The fact that even more activities have migrated to cyberspace during the coronavirus crisis, and are likely to at least partially remain there, adds urgency to efforts to improve 5G (and subsequently 6G) security. It also makes the need for arms control in cyberspace a top priority. Without legally binding rules, countries and their proxies will continue to attack one another in cyberspace. This is an untenable situation. Kaljurand posited that at the UN, cyber security is so politically divisive that there is little prospect of success for UN-sponsored digital arms control. The OSCE faces similar challenges. NATO and the EU, meanwhile, would have much less trouble reaching consensus on digital norms – but face the very obvious hurdle that they do not represent both, or all, sides of the global cyber battle.

Though there have been other attempts to establish effective cyber arms control regimes, including an agreement by President Barack Obama and President Xi Jinping in 2015 to 'identify and promote appropriate norms of state behaviour in cyberspace within the international community',[13] they have largely been ineffectual. Unlike the nuclear arms race during the Cold War, today's cyber arms race involves numerous countries, which makes arms control much harder than the nuclear arms control regimes achieved by the US and the Soviet Union/Russia. Sweden, a technologically advanced country that has experience in being targeted by cyber attacks, could play a vital international role in leading diplomatic efforts to launch substantial cyber arms control negotiations.

Disinformation and Misinformation

False or not Provably False

Adversarial information behaviour – both by disaffected citizens and by groups linked to hostile governments – has significantly increased on social media platforms.[14] People spending even more time online than usual, and doing so in isolation, has further exacerbated the impact of such adversarial behaviour, which includes sharing of misinformation and disinformation. In many countries, including the UK, coronavirus disinformation has taken a decidedly frightening turn as it has falsely linked 5G antennas to the disease. This has prompted some people to sabotage more than 120 5G antennas in 10 European countries.[15] Indeed, low-intensity conflict in the West is likely to be dominated by the struggle for narrative – that is, an information versus disinformation battle – rather than by 'little green men'.

At the event, Gleicher explained Facebook's Actor Behaviour Content framework, with which the company categorises disinformation and misinformation threats. The vast majority of information seen as disinformation or misinformation is, however, not provably false, he pointed out.

13. White House, Office of the Press Secretary, 'Remarks by President Obama and President Xi of the People's Republic of China in Joint Press Conference', 25 September 2015.
14. Jon-Patrick Allem, 'Social Media Fuels Wave of Coronavirus Misinformation as Users Focus on Popularity, Not Accuracy', *The Conversation*, 6 April 2020.
15. Information provided to the author by the European Telecommunications Network Operators' Association, 29 May 2020.

Instead, most statements are propaganda or opinion. According to Facebook analytics provided by Gleicher, more than half of the deceptive activities are domestic and not government-linked. Sometimes foreign governments and proxies act through such domestic groups.

This reality presents governments with a problem. On their own, they cannot control activities on social media platforms: they can merely ask those platforms to monitor activities and take action. In 2019, Gleicher said, more than 50 deceptive groups were deleted from Facebook. But with the line between propaganda and misinformation/disinformation often unclear, the latter continues to flourish. The UK House of Commons Committee on Culture, Digital, Media and Sport has played a key role in investigating digital disinformation and fake news; regrettably, its work has to date not led to any sort of breakthrough. In the wake of the coronavirus crisis with its intense misinformation and disinformation activity, some liberal democracies may decide that the only resort is more regulation of social media companies. Some may even decide to treat social media companies like water or power utilities.

International Cooperation and Coordination

We Hang Together or We Hang Separately

Eliasson joined the MSB as its director general in 2018. The extreme heat that summer, he noted at the event, led to extensive forest fires that fire departments struggled to contain. There were no casualties, and the government's institutions and wider society could conduct daily life with very little disruption. But many European partners likewise played a role in the fight against the fires, dispatching firefighters and equipment to assist Swedish colleagues.

The coronavirus pandemic presents a very different type of crisis, Eliasson noted: the threat is invisible; people are dying in large numbers; there is no clear endpoint; and initially there was limited European or international cooperation. In a pandemic as well as in other contingencies involving more than one country, international cooperation is indeed vital. The lack of it during the coronavirus crisis has revealed that even exceptionally powerful countries such as the US struggle to keep their own citizens safe if they cannot count on assistance – including, in this case, deliveries of medical supplies – from other countries.

That is not to say that international crisis cooperation does not exist. European partners' support of Sweden during the 2018 forest fires was impressive, and there have been many other examples in recent years, including the humanitarian assistance to the victims of the earthquakes that hit Iran in 2003 and Japan in 2011.[16] The challenge is how to assist one another in crises that affect not just two countries but many countries or indeed the whole world.

There are reasons to be hopeful. The pandemic has shown that acting on a purely national basis during a global crisis does not, in the long run, benefit anybody: on the contrary, collective

16. Liz Ford and Claire Provost, 'Japan Earthquake: Aid Flows in from Across the World, *The Guardian*, 14 March 2011.

action can be a win–win. That, however, requires careful contingency planning. The MSB has long focused on building cooperation with fellow contingencies agencies around the world; such cooperation should be intensified and operationalised. Contingencies agencies should work together to strengthen existing coordination mechanisms such as the EU's Emergency Response Coordination Centre and NATO's Euro-Atlantic Disaster Response Coordination Centre.

Vaccine development was another aspect of international cooperation that was highlighted at the event. Inglesby noted that efforts to develop coronavirus vaccines are taking place in numerous countries and are led by a range of actors including private companies, but cautioned that vaccine development is not happening fast enough. Indeed, in the future, countries will need to invest much more in preparing vaccines for threats that are still unknown. Efforts to develop vaccines cannot be undertaken by individual countries, as they will need to serve the global population. Countries – working with their private sectors – need to pool resources, and without international cooperation, wealthy countries are likely to get access to vaccines long before developing ones. Inglesby argued that one answer is to strengthen the World Health Organization (WHO).

Section 2: Commentaries

The Brave New Post-Covid World

Michael Chertoff

ALTHOUGH NEW COVID-19 infections and deaths continue to rise worldwide, it is not too early to imagine what the world will look like as the pandemic recedes. Certainly it will be a profoundly different world, permanently impacted in some respects by the trauma of the most disruptive global event since the Second World War.

I believe there will be at least four major takeaways.

First, the process of emerging from the pandemic will have to be an exercise of risk management, not an effort at risk elimination. In the absence of a vaccine, a strategy to stop all virus-related infections and deaths would require a strict lockdown that would break the global economy, cause other health and psychological damage, and be unsustainable. On the other hand, those arguing for full resumption of normal activity are overlooking how rapidly a spike in viral transmission could occur, with overwhelming attendant strains on our overall health systems.

A reasonable strategy would be to reduce incidence among vulnerable people, ensure that the rate of new cases continues to decline and maintain an adequate healthcare response. This involves frequent testing and minimising indoor crowding and unprotected social interaction, even while carefully and deliberately reopening business and government functions.

Second, a general lesson of our current experience – not limited to epidemics – is the importance of government and business strategies that foster resilience and alternative supply chains. In recent years, the emphasis on reducing costs through hyper-efficient, lean supply chains has eliminated redundancy. But when disease, disaster or war disrupts existing arrangements, some redundancy and alternative pathways are essential to foster resilience and recovery. We must rebuild our resilience, which includes stockpiling essentials and deliberately fostering multiple sources of supply for critical goods.

Third, while we are fully occupied managing this crisis, we do not have the luxury of ignoring other threats, be they from terrorists, extremists or rival states. There has been a rise in the level of domestic extremism in the US, and that may result in an uptick in violence. International terrorism has not disappeared. We also have seen foreign disinformation campaigns, particularly targeting health and pandemic response. With impending elections, we must be especially vigilant to ensure that adversaries do not interfere with campaigns or elections through aggressive online disinformation stratagems and even corruption or destruction of underlying election infrastructure.

Perhaps most notably, our experience during the pandemic has underscored how vulnerable our networks are to cyber attacks. As more people connect remotely, often using poorly secured home devices, the surface area for attacks has increased. Since more remote work is likely to be a permanent feature of our future, this underscores the importance of scaling up our security efforts and capabilities.

An essential element of this is international agreement on preserving and protecting the essential infrastructure of the global internet.

This leads to the final, and perhaps counterintuitive, lesson of the pandemic: we need more global cooperation and coordination, not less. For a certain category of global threats, whether it be viruses or climate change, or threats to the global infrastructure of the internet, no single state can act in isolation. Only concerted international action can suppress or mitigate these challenges. In respect to the pandemic, China's effort to minimise and conceal the initial outbreak appears to have lost valuable response time both in China and globally.[17] In the past, the WHO has been able to inform and enable multinational coordination that suppressed other disease outbreaks. To the extent that mechanism fell short, the response should be to reform and reinvigorate that organisation.

To secure internet infrastructure, a multi-stakeholder approach may be best. The Global Commission on Securing Cyberspace (which I co-chaired) has proposed a number of cyber norms, such as a commitment to safeguard the public core of the internet. A number of these norms have been endorsed by states and could be institutionalised through the UN Group of Government Experts and the Open Ended Working Group. Finally, climate change targets could be embodied and fostered through a new multinational, public–private partnership that would synchronise regulation and incentivise green investments as our global economy recovers.

Whatever our differences on many issues, when it comes to protecting our whole planet and our global commons, all the major powers must act with the understanding that – to paraphrase Benjamin Franklin – we hang together or we hang separately.

Michael Chertoff is Co-founder and Executive Chairman of the Chertoff Group and former US Secretary of Homeland Security.

17. *BBC News*, 'Li Wenliang: Coronavirus Kills Chinese Whistleblower Doctor', 7 February 2020.

The Coronavirus Pandemic: An Opportunity for Democratic Renewal

Kevin Casas-Zamora

THE CORONAVIRUS PANDEMIC poses dramatic challenges for democracies around the world. The combination of potential abuse of emergency powers, tampering with electoral calendars, increased surveillance of citizens and mass unemployment-induced political instability is a dangerous cocktail for democracies already buffeted by headwinds. Much less remarked upon, however, is the fact that the current crisis offers unique opportunities for democratic renewal.

This emergency is revealing in stark tones the social, economic and political fault lines that were pulling many societies apart well before the virus struck. In country after country, it has become evident that the pandemic preys on the most vulnerable groups, afflicted by lack of access to adequate healthcare, over-crowding and myriad underlying conditions that expose them to the ravages of the disease. While the middle and upper classes can more easily adapt their work and lifestyles to a life in quarantine, the majority of the world cannot. For those in the developing world who live off the informal economy or rely on real-world interactions, such as selling their wares on the streets, teleworking is not an option and quarantine is an unaffordable luxury. This pandemic multiplies poverty and inequality with the same ease, which serves to only accentuate the effects of the disease. In the US, over 40% of the jobs paying less than $40,000 per year have disappeared over the past two months, a period during which US-based billionaires added $434 billion to their fortunes, according to a report from the group Americans for Tax Fairness.[18] The virus was not created by humans, but the patterns of its dissemination and consequences most certainly are.

In many countries, the fault lines and inequalities revealed by the pandemic are simply not compatible with a healthy and stable democracy. If they are to stave off the dangers of populism and authoritarianism, many democracies will have to return to the drawing board and renegotiate the social contract, the distribution of burdens between social groups, and the relationship between societies, states and markets. In Latin America, which exhibits some of the world's worst income inequality levels,[19] Peru and Argentina in particular are seeing increasing

18. Jeff Cox, 'Nearly 40% of the Poorest Households Hit with a Job Loss During Pandemic, Fed Study Shows', *CNBC*, 14 May 2020; Americans for Tax Fairness, 'Tale of Two Crises: Billionaires Gain as Workers Feel Pandemic Pain', 21 May 2020.
19. Verónica Amarante, Marco Galván and Xavier Mancero, 'Inequality in Latin America: A Global Measurement', in *CEPAL Review 118* (Santiago: UN Economic Commission for Latin America and

talk of imposing wealth taxes to ensure the costs of the coronavirus impacts do not primarily fall on the poor.[20] In both the developed and developing world there is greater recognition of the dire price that societies pay for underproviding public goods, particularly healthcare. The sight of a visibly moved Prime Minister Boris Johnson heaping praise on the National Health Service and calling it Britain's 'greatest national asset', suggests that a long overdue rebalancing of the relationship between states and markets may be already in the making.[21]

Countries will need to strengthen institutions able to lead the wide-ranging social and political dialogue that will be needed to heal the wounds revealed by the pandemic. In most places, parliaments and political parties – suffering from low credibility and trust – will not be able to do the heavy lifting required. The National Economic and Social Councils that, in different versions, exist in 22 of the 27 members of the EU, offer a promising venue for such a dialogue.[22] Unfortunately, such institutions are not found in many places outside Europe. In other places, constitutional assemblies may offer an opportunity. That is the case of Chile, where the massive anti-inequality demonstrations in late 2019 led to the decision to start a process of constitutional redrafting, now interrupted.

One can only hope that the sheer magnitude of this crisis will result in many new constitutional settlements, fiscal pacts and social covenants of the kind that frequently emerge in post-conflict and post-authoritarian contexts. If that happens, this crisis could pave the way for more inclusive societies, fairer economic structures and more democratic political systems. It is not an unfounded hope. History has proven that progress often follows breaking points. This is what happened during the democratic transition in Spain, where the 1977 Moncloa Pacts forged a lasting political covenant and helped soothe a society polarised by the memory of the Spanish Civil War.[23] This is also what happened in 1950s Western Europe, where a new social democratic consensus, robust welfare states and a consolidating union emerged from the ashes of the Second World War.

The alternative to this kind of dialogue is violence, political instability and authoritarianism: in other words, darkness. And this is exactly what happened in many countries during and after the Great Depression of the 1930s.

Thus, both outcomes have historical precedents, and both will almost certainly emerge in the next few years. It is incumbent on everyone to work to advance democracy and to do everything within reach – from speaking up, to nudging others into action and facilitating knowledge –

---

the Caribbean, April 2016), pp. 27–28.

20. *Bloomberg Tax*, 'Countries Seek New Revenue Sources to Pay for Virus Relief (1)', 15 May 2020.
21. *The Guardian*, 'Boris Johnson Leaves Hospital as He Continues Recovery from Coronavirus', 12 April 2020.
22. European Economic and Social Committee, 'The Economic and Social Councils of the Member States of the European Union: The Different Models of Dialogue', 2018, p. 4.
23. *Catalan News*, 'Sánchez Faces Uphill Struggle to Repeat Historic Moncloa Pact to Overcome Crisis', 7 April 2020.

to help countries go down the route of dialogue, towards a better social, economic and political equilibrium.

The coronavirus catastrophe does not have many silver linings. This opportunity for democratic renewal is one. It should be grabbed with both hands.

Kevin Casas-Zamora is Secretary-General of the International Institute for Democracy and Electoral Assistance (International IDEA).

Lessons from the Coronavirus Crisis: The Medical Perspective

Tom Inglesby

WE HAVE A global need to make a vaccine faster. We are now almost half a year into this pandemic and there are about eight vaccines in human trials and over 100 vaccine projects underway. Major vaccine development efforts are underway in China, with the Coalition for Epidemic Preparedness Innovations, with the WHO, in the US and in other countries. If everything goes in the right direction, leading vaccinologists have said there is a chance of production starting at the end of 2020 or beginning of 2021. The creation of a vaccine in such a short time would be unprecedented. But it is not fast enough to head off incredible sickness, death and economic ruin around the world. We need to invest much more in preparing to make vaccines for unknown threats that emerge without warning.

We need to rethink supply chains for masks, gowns, gloves and critical supplies. When epidemics are local or regional, the emergency supply chain can pivot toward helping that region. But in a pandemic, everyone needs the same critical materials at the same time. The US was woefully unprepared with insufficient supplies of masks, gowns, gloves and eye protection. Countries should not all be dependent on the same few global suppliers. Suppliers should be more broadly distributed around the world, and they should be paid to have capacity to ramp up at scale if needed in a crisis. We need to build for surge. We are too stripped down for efficiency now and it did not work.

The world needs a strong WHO. The WHO has been providing technical advice to countries around the world since the pandemic began, and has been sending assistance teams to places in need. The WHO has helped rally the world for a new approach to vaccine and therapeutic trial design. It created a coalition of countries from around the world to donate to vaccine development efforts. We should do all we can to strengthen the WHO.

Pandemic preparedness is key for economic security. It is very clear now that pandemics can have a terrible impact on national and global economies. Stay-at-home orders have been necessary, but devastating to economies and jobs. Reopening is now beginning in many places, and that may help to begin economic recovery. But many people are not going to go out to buy things, seek entertainment or go back to various jobs until they feel safe doing those things. To feel safe, we need to control the epidemic through key tools including diagnostics, isolation and contact tracing, and ultimately with a vaccine. It has become painfully clear how tied our economic security is to the recovery from this pandemic, and the prevention of and preparedness for future ones.

Full recovery in one country will require recovery in all countries. Given how interconnected we are in the world, we are not going to get our full footing back until most of the world is either vaccinated, or if we fail to get a vaccine, then until most of us have been infected, and have recovered and become largely immune. Global trade and business will still be badly impaired until we are able to make the world broadly safe from infection and the resulting disease.

Let us stop calling pandemics 'low-probability, high-consequence' events. In the epidemic response world, that term has been used for a long time, and it can dull the senses. It can lure leaders into thinking that such an event will not happen while they are in charge. Given the changes in climate, given the high-levels of global connectedness, given the way that animals and people live together in massive numbers, and given the further intrusions into animal ecosystems, pandemics are going to happen, and they will not happen with warning or predictable timing. Pandemics are high-consequence. We do not know their immediate probability, but they are high probability in the longer run. The day before we recognised the first case of Covid-19, a pandemic seemed a remote possibility. That was wrong. We need to anticipate pandemics and strategically prepare for them.

Pandemics affect all of society, and they require resilience across society. In some crises, the government can rely on the armed forces, in other crises it can rely on first responders. Pandemics are different. They affect all parts of society: hospitals; public health; businesses; the food supply; manufacturing; tourism; schools; places of worship; the military and more. Unlike an earthquake or an act of terrorism, where it is possible to understand the breadth of the problems relatively soon after the event, pandemics continue to worsen and spread more widely over time. All of society has a role to play in preparing for, and responding to, this kind of event. Some countries, including Sweden, already have a strong tradition of societal resilience. Others have more work to do. But for all countries, stronger societal resilience to pandemics should be our goal.

Tom Inglesby is Director of the Johns Hopkins Center for Health Security.

Preparing for Hazards: What We Can Learn from the UK's Experience of Combating the Coronavirus Pandemic

Pauline Neville-Jones

WELL BEFORE THE coronavirus pandemic, a pandemic had been identified by the UK government as a Tier One risk on the National Risk Register. This meant that its likelihood was considered sufficiently great and its impact sufficiently severe that it should be prevented as far as possible and tightly managed when prevention failed. In 2016, a pandemic planning exercise, Cygnus, based on a response to H1N1 Influenza, was held, the results of which led to the conclusion that the UK was far from adequately prepared. Four years later, a coronavirus similar to those that cause Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) reached the UK.

Contrast the way in which the coronavirus pandemic has been managed with the UK's performance in relation to terrorism and cyber attacks, also Tier One risks, which can fairly be judged as world leading. Objections will be raised that a hazard like a pandemic is not the same as threats such as terrorism or cyber attack. Of course, they are not identical, but there are sufficient similarities for it to be worth asking why the gap in quality of management has been so great and what could be learnt from success in relation to terrorism and cyber attack. Like terrorism, pandemics involve loss of life; like a cyber attack, they are potentially highly disruptive across a broad swathe of daily life and their successful management demands competence in which the public can place trust.

One of the striking features of the UK response to terrorism has been the extensive investment in prevention by way of the creation of new, adequately funded machinery in government departments and the police; international and domestic activity devoted to the discovery and tracking of terrorists; practised routines during attacks; and public education. Increasing the country's level of cyber protection has led to a similar level of creativity involving new governmental institutions and intense joint work with the private sector. Terrorism and cyber attack have not been treated as individual events to be managed for the short period of abnormality they bring about until normality is restored. Their prevention and management have been embedded in the day-to-day operation of government. The extensive and damaging effect they could otherwise have is being minimised by daily effort.

Threats and hazards are changing. A globalised world and the interconnectedness of society mean they spread more quickly, have bigger, more damaging effects which can last a long time

and can be life-changing. The side effects of climate change, such as flooding, illustrate another facet – they can occur more frequently, upending accepted calculations about likelihood. And they are becoming more complex. The distinction between hazard and threat is blurring. Which, for instance, is Covid-19? And they can be, and are, being accompanied by misinformation, disinformation, propaganda, espionage, theft and other forms of criminality.

The consequent cost and variety of unwanted consequences which can arise from a modern emergency should persuade governments to make significant investment in prevention of major risks despite upfront expense. That such preparation may never be tested should be seen as a sign of success, not waste. Well-designed preventative measures will also reduce severity of impact when a given risk, despite precautions, nevertheless materialises.

Given the UK's extensive publicly funded health system – in which its hospitals and care homes have performed heroically during the coronavirus pandemic – it is worrying that the initial response was fumbled so badly. In addition to the failure to follow up the specific recommendations of the Cygnus exercise,[24] there appears to have been little interest in the experience of countries which had suffered from SARS or MERS. Despite its known importance to infection control, there was no pre-positioning of the ability to track and trace at scale using techniques which, historically, have often been invented in the UK and which are the responsibility of Public Health England and of the devolved administrations.

The purposive adaptation of government machinery and policy which occurred in the case of terrorism and cyber attack simply has not happened. Perhaps, paradoxically, the existence of the NHS has induced a false sense of comfort. It may also be easier to start from scratch than to adapt and reform existing institutions and policies. But like terrorism and cyber, the coronavirus pandemic has changed life permanently and there will need to be major 'retrodesign' to ensure the continuing suppression of this virus and any others that may arise. Resilience is not just the ability to resume normal life as soon as possible. It is the capability and capacity to reduce future risks such as climate change which must now be a continuous – not periodic review – task of the UK government's Fusion Doctrine. A change of mindset about priorities is needed in which the underfunded and underpowered Civil Contingencies Secretariat should be equipped to do its important job.

Pauline Neville-Jones is a member of the House of Lords and former Minister of State for Security and Counter Terrorism.

24. David Pegg, Robert Booth and David Conn, 'Revealed: The Secret Report that Gave Ministers Warning of Care Home Coronavirus Crisis', *The Guardian,* 7 May 2020.

The Future of Emergency Management after the Coronavirus Pandemic

Craig Fugate

THE CORONAVIRUS PANDEMIC was foreseeable, but many did not understand how different this response would be from other disasters. With the exception of a few emergency management organisations, pandemic planning was largely the responsibility of public health officials whose focus was on management of the response to the disease, but not the consequences.

Pandemics (like cyber attacks and climate change-related events) are borderless disasters. Pandemics are a borderless disaster, moving through vectors. In the case of the current pandemic, people are the vector. In the traditional disaster response model, resources and personnel are moved from non-impacted areas to the area of impact. A pandemic striking across the globe clearly limits the use of that response model. Supply chains are stressed by multiple demands and impacts on production due to illness and protective measures. These concerns are also seen in cyber attacks and climate change-related events.

Efficiency is the enemy of resiliency. Over the past several years, the US has moved to global medical equipment supply chains, combined with just-in-time delivery systems. This has resulted in lowering the cost of medical supplies. The system is efficient during normal times and has some capability to adjust during most disasters. But as the production of medical supplies and equipment was moved out of the US, domestic production fell.[25] In the planning for a pandemic, this was identified as a key shortfall: the US no longer had the domestic production capabilities for PPE.[26] In short, the medical supply system was not resilient in a pandemic. To prevent failures of medical supply chains during future pandemics, one option will be to rebuild domestic production capabilities to offset the risk of global supply chain disruptions.

In addition to supply chain challenges, response personnel also pose a concern during a pandemic. Moving responders into a disaster area – for example, firefighters to battle forest fires – could introduce the virus in that area, or responders returning home could bring the illness to their

25. Sydney Lupkin, 'What Would It Take to Bring More Pharmaceutical Manufacturing Back to the US?', *NPR*, 24 April 2020.
26. Nick Schifrin, 'After "Cutthroat" Global Competition for PPE, US Seeks to Make More at Home', *PBS*, 5 May 2020.

communities at the end of the deployment. Even with PPE, there is an increased risk inherent in the deployment of large numbers of people to disaster zones. In the US, many of the volunteers who have historically staffed emergency shelters and provided other mass care services have come from all over the country to help, but were also in high-risk groups for Covid-19.

The public is a resource in a disaster. In response to these issues, disaster response models will need to be rethought, especially bearing in mind that a pandemic can occur in combination with another contingency. If moving people risks spreading the virus, how do we evacuate and care for those at risk from natural hazards like hurricanes? Where will the emergency workforce come from? How do we prepare the public for choices it will need to make during these events? Since most people are not trained in emergency response, US authorities have not expected the public to do much. But this approach only works in emergencies where authorities have enough resources. In most disasters, there are not enough resources, and the public would be the most important asset. The fastest response in disasters can be a neighbour helping a neighbour.

When possible, hire local, buy local. Instead of bringing people from outside the disaster area to provide mass care, authorities should use people living there. In the US, the Federal Emergency Management Agency hires people to assist in disaster response, and contracts local businesses to provide goods and services. In addition, to feed people in a disaster area, authorities could contract local restaurants to prepare meals. (This is currently underway in some communities to feed residents during the coronavirus pandemic.[27]) As the pandemic has resulted in fewer travellers, many hotels are available to house evacuees. During future pandemics, authorities could contract hotels, rather than only using emergency evacuation shelters where social distancing will be a challenge. In the US, this concept of the public and the private sector working with local authorities in a disaster is referred to as 'whole of community'.

Give the public all the information it needs to make informed choices during a crisis. In a crisis, public officials are often more afraid of providing bad news or causing panic than about informing the public of the risk. However, equipped with more information, citizens would be able to make better choices. Holding back information and treating the public as a liability has not worked before and it is certainly not working now. Countries where there has been more and clearer information about the coronavirus pandemic have seen much better compliance with protective measures, for example, social distancing, wearing PPE and following stay-at-home orders.

When the public loses confidence in its government, government no longer leads in a crisis. Public confidence in its government during a crisis is also a measure of national resilience. With more confidence in the authorities, people are more willing to act and make sacrifices that might not be in their self-interest.

Craig Fugate is Chief Emergency Management Officer at One Concern and former Administrator at the US Federal Emergency Management Agency.

27. *CBS Los Angeles*, 'FEMA Partnership with California to Deliver Meals to Seniors, Jobs for Restaurants', 24 April 2020.

About the Editor

Elisabeth Braw directs RUSI's Modern Deterrence project, which focuses on how governments, business and civil society can work together to strengthen countries' defence against existing and emerging threats. She is a columnist for *Foreign Policy* and contributes to the *Wall Street Journal*, *The Financial Times*, *The Times* and the *Frankfurter Allgemeine Zeitung*. Elisabeth is also a member of the steering group of the Aurora Forum (the UK/Nordic/Baltic leadership forum), the author of *God's Spies* and hosts the *On the Cusp* podcast.