COVID 19 and GADRI



COVID-19 – Lessons from Disaster Research

Decades of disaster research provide important lessons that will help us through the COVID-19 pandemic. Speaking as one, the leaders and members of the Global Alliance of Disaster Research Institutes, the North American Alliance of Hazards and Disaster Research Institutes, United Kingdom Alliance for Disaster Research and the Africa Alliance for Disaster Research Institutions know that:

First, this global pandemic has been widely anticipated and foretold. Experts over many years forecast a pandemic with scale of illness, swiftness of spread, scarcity of critical medical resources and profound impact on society such as we are now experiencing. Current response efforts and decision-making are benefiting from previous pandemic and disaster research. Disaster research provides an essential science foundation for effective decision making before, during and after a crisis strikes.

Second, much of this knowledge did not translate into adequate preparedness. This is part of a larger phenomenon that experts have identified as "planning for the last disaster." We often invest in getting ready for the last disaster with a fading sense of urgency as time passes. Stockpiling of resources and redundancy in capacity is seen as wasteful and is eliminated rather than being recognized as preparedness for inevitable extreme weather, geophysical, epidemic or other hazards. Discounting future impacts over current circumstances may be characteristically human, but this myopia based on political or economic benefits is short-term, particularly common among persons and entities making decisions in the public-political arena who, moreover, don't bear the brunt of their decisions. We know from past studies that actions taken in advance to prepare for known risks consistently result in avoided losses many times greater than the cost.

Third, failure to prepare most impacts those who are marginalized and disenfranchised—the poor, the sick, minorities, immigrants, refugees, the uninsured and children. For nations where social safety nets are frayed or non-existent, residents will depend on financial support and rescue packages from their government. Without coping and recovery mechanisms, resort is to reactive ad-hoc emergency spending rather than investments in community resilience that would avoid hardship in the first place.

Fourth, abiding by core principles of risk communication can save lives. Decades of research have established best practices for effective communications in a disaster. These include messages tailored to specific audiences from trusted sources on what to do and how to do it, especially for more vulnerable groups less likely to receive information through traditional channels. Many of these core principles are currently being violated. This must stop, as lives are being lost. We need to have effective risk communication.

Fifth, transparency, situational awareness and recovery planning are essential. Only when we truly understand the risk and most effective responses can we all contribute to the solution. Many fields of science rely on global and open exchange of data. A continuing stream of ambiguous and incomplete messages erodes public confidence and the ability to effectively manage the disaster. While the current priority is rightly focused on preventing the spread of COVID-19, responding to the needs of those infected and addressing the severe economic dislocations, it is also important to begin planning for recovery. As early as possible, a longer-term vision of the impact, recovery planning and endgame are needed so that people and businesses can plan, act and recover.

Sixth, extreme events evoke remarkable acts of altruism but also can bring about a disturbing lack of humanity. It is important to celebrate positive actions, including mutual support for friends and strangers in need. It is just as crucial that we remain watchful for abuse and wrongdoing at all levels of society and take action to confront inappropriate behaviour.

Lastly, as our global community struggles with the pandemic, we must also continue to be prepared for flooding, wildfires, hurricanes, tornadoes and other

natural hazards, and not lose sight of the long-term issue of climate change. Moreover, COVID-19 requires that we adapt some established emergency management practices, like planning for emergency evacuation shelters.

Sound science is essential to good decisions. Disaster research finds that those who embrace evidence-based preparedness in their risk management practices suffer less and rebound quicker.

By: GADRI Secretary-General, members of the GADRI Board of Directors, GADRI Advisory Board, and other members of GADRI

- Hirokazu Tatano, DPRI, Kyoto University, Japan
- Charles Scawthorn, University of California, Berkeley, USA
- Lori Peek, Colorado University, Boulder CO, USA
- Paul Kovacs, University of Western Ontario, Canada
- Andrew Collins, Northumbria University, U.K.
- Gretchen Kalonji, Sichuan University, China
- Manabu Hashimoto, DPRI, Kyoto University, Japan
- Renn Ortwin, Institue for Advances Studies (IASS), Germany
- Zita Sebesvari, Institute for Environment and Human Security, United Nations University, Germany
- Peter Sammonds, Institute for Risk and Disaster Reduction (IRDR), University College London, UK
- David Alexander, Institute for Risk and Disaster Reduction (IRDR), University College London, UK
- John van de Lindt, Colorado State University, USA
- Toshio Koike, Public Works Research Institute (PWRI), International Centre for Water Hazard and Risk Management (ICHARM) under the auspices of UNESCO, Japan
- Mahua Mukherjee, Indian Institute of Technology (IIT) Roorkee, India
- Indrajit Pal, Asian Institute of Technology (AIT), Thailand
- Rodrigo Cienfuegos, Centro Nacional de Investigacion par la Gestion de Desastres Naturales (CIGIDEN), Santiago, Chile
- Fumihiko Imamura, International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan
- Yuichi Ono, International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan
- Stefan Hochrainer-Stigler, International Institute

- for Applied System Analysis (IIASA), Austria
- Qian Ye, Earth Surface Processes and Resource Ecology (ESPRE), Beijing Normal University, China
- Khalid Mosalam, University of California, Berkeley, USA
- Wei-Sen Li, National Science and Technology Center for Disaster Reduction (NCDR), Chinese Taipei
- Mohsen Ghafory-Ashtiany, Iranian Earthquake Engineering Association (IEEA), Iran
- Jörgen Sparf, Mid Sweden University, Sweden
- Walter Ammann, lobal Risk Forum (GRF Davos), Switzerland
- Kaoru Takara, Graduate School of Advanced Integrated Studies in Human Survivability (Shishukan), Kyoto University, Japan
- Gary Wilson, GNS Science Te Pu Ao, New Zealand
- Desmond Manatsa, Bindura University of Science Education, Zimbabwe
- Tom de Groeve, European Commission, Joint Research Centre (JRC), Italy
- Rajib Shaw, Shonan Fujisawa Campus (SFC), Keio University, Japan
- Irasema Alcántara-Ayala, Institute of Geography, National Autonomous University of Mexico (UNAM), Mexico
- David Eisenman, University of California, Los Angeles, USA
- Melanie Gall, Arizona State University, USA
- Karl Kim, University of Hawaii, USA
- Jamie Kruse, East Carolina University, USA
- Selwyn Mahon, American University of the Caribbean School of Medicine, St Maarten
- Rich Olson, Florida International University, USA
- Jean-Paul Pinelli, Florida Tech, USA