



Press Release

Better Prepared for Future Crises: Recommendations from Risk Researchers

Although there were early warnings of an exponentially growing pandemic, most policymakers around the world were unprepared and reluctant to act when Covid-19 first spread from China around the world. Since then the crisis has led to unprecedented restrictions and triggered the worst recession since the Second World War. In an [article published in the Journal of Risk Research](#), Aengus Collins, Marie-Valentine Florin (both [EPFL International Risk Governance Center](#)) and IASS Scientific Director Ortwin Renn analyze the key factors and offer recommendations on how we can better prepare for future crises.

The article gives an overview of the spread of Covid-19 and outlines six causes of the crisis: the exponential infection rate, international integration, the insufficient capacity of health care systems in many countries, conflicts of competence and a lack of foresight on the part of many government agencies, the need to grapple with the economic impacts of the shutdown parallel to the health crisis, as well as weaknesses in capital markets resulting from the financial crisis of 2008. The solutions proposed by the team of authors were developed using a framework developed by the [International Risk Governance Council](#) to which Ortwin Renn contributed.

According to the study, five of the aspects of risk governance described in the framework are particularly relevant for efforts to overcome the Corona Crisis. Accordingly, the authors highlight the importance of increasing global capacities for the **scientific and technical appraisal of risks** in order to provide reliable early warning systems. This research must be supplemented by an analysis of the **perceived risk** – i.e. individual and public opinion, concerns, and wishes. The awareness of and acknowledgement of these perceptions facilitates effective crisis communication and enables authorities to issue effective public health guidelines. This leads to a key task for decision-makers – **risk evaluation**: Whether and to what extent are risk reduction measures necessary? What trade-offs are identified during the development of measures and restrictions and how can they be resolved on the basis of recognized ethical criteria in light of the considerable degree of uncertainty? This characterization and evaluation of the risk provides qualified options for **risk management**. The focus here is on the development of collectively binding decisions on measures to minimize the suffering of affected populations as a whole as well as strategies to minimize undesirable side effects. Coordinated crisis and **risk communication** underpinned by robust scientific and professional communications expertise is crucial to the success of efforts to tackle the crisis.

The team of authors has distilled **ten recommendations** from its findings:

1. **Address risks at source:** in the case of pandemics this means reducing the possibility of viruses being transmitted from animals to humans.
2. **Respond to warnings:** This includes the review of national and international risk assessments, and the development of better safeguards for risks with particularly serious impacts.
3. **Acknowledge trade-offs:** Measures to reduce a particular risk will impact other risks. Undesirable side effects must be identified in risk assessments.
4. **Consider the role of technology:** How can machine learning and other technologies be applied to support pandemic assessment, preparedness, and responses?

5. **Invest in resilience:** Gains in organizational efficiency have made critical systems such as health care more vulnerable. Their resilience must be strengthened, for example by reducing dependencies on important products and services.
6. **Concentrate on the most important nodes in the system:** The early imposition of restrictions on air travel have proved effective in combating a pandemic. A global emergency fund could be established to address the cost of such measures.
7. **Strengthen links between science and policymaking:** Those countries in which scientific information and science-based policy advice are readily available to policymakers have had greater success in combating the coronavirus.
8. **Build state capacities:** Tackling systemic risks should be viewed as an integral aspect of good governance that is performed on a continuing basis rather than as an emergency response.
9. **Improve communication:** Communications around Covid-19 was slow or deficient in a number of countries. One solution would be the establishment of national and international risk information and communication units.
10. **Reflect on social disruption:** The Corona Crisis is forcing people and organizations to experiment with new work and life patterns. Now is the time to consider which of these changes should be maintained over the longer term.

Publication:

Aengus Collins, Marie-Valentine Florin & Ortwin Renn (2020) COVID-19 risk governance: drivers, responses and lessons to be learned, Journal of Risk Research, DOI: [10.1080/13669877.2020.1760332](https://doi.org/10.1080/13669877.2020.1760332)

Press contact:

Dr Bianca Schroeder
Press & Communications
Institute for Advanced Sustainability Studies e.V. (IASS)
Phone: +49 (0)331 288 22-341
Mail: bianca.schroeder@iass-potsdam.de
<http://www.iass-potsdam.de>

The **Institute for Advanced Sustainability Studies (IASS)** conducts research with the goal of identifying, advancing, and guiding transformation processes towards sustainable societies in Germany and abroad. Its research practice is transdisciplinary, transformative, and co-creative. The institute cooperates with partners in academia, political institutions, administrations, civil society, and the business community to understand sustainability challenges and generate potential solutions. A strong network of national and international partners supports the work of the institute. Among its central research topics are the energy transition, emerging technologies, climate change, air quality, systemic risks, governance and participation, and cultures of transformation. The IASS is funded by the research ministries of the Federal Government of Germany and the State of Brandenburg.

If you no longer wish to receive IASS press briefings, please send an e-mail with the subject line "Unsubscribe" to media@iass-potsdam.de