

### PANDEMIC + [X]: WHAT WE'VE LEARNED

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# THE WORLD METEOROLOGICAL ORGANIZATION COVID-19 TASK TEAM

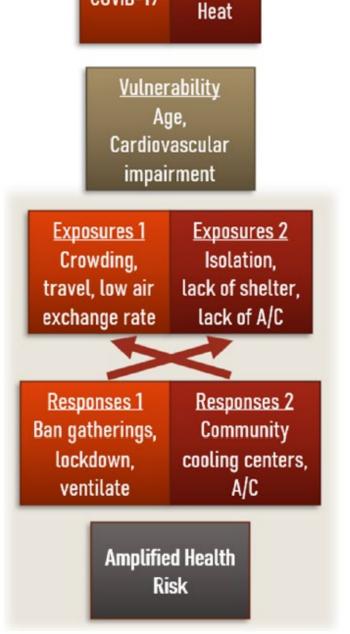
### **BAMS** Meeting Summary

## Planning for Compound Hazards during the COVID-19 Pandemic

#### The Role of Climate Information Systems

Benjamin F. Zaitchik, Judy Omumbo, Rachel Lowe, Maarten van Aalst, Liana O. Anderson, Erich Fischer, Charlotte Norman, Joanne Robbins, Rosa Barciela, Juli Trtanj, Rosa von Borries, and Jürg Luterbacher





Hazard 2

Extreme

Hazard 1

COVID-19

Zaitchik et al. (2022)

### **COORDINATE IN ADVANCE**

Decision-relevant information is held by a variety of agencies with different rules and mandates.

It is difficult to build compound risk information systems in real time.

Invest in systems that combines hazard analysis with dynamic exposure and vulnerability information.

Identify mechanisms that facilitate integration and dissemination of diverse data in real time.



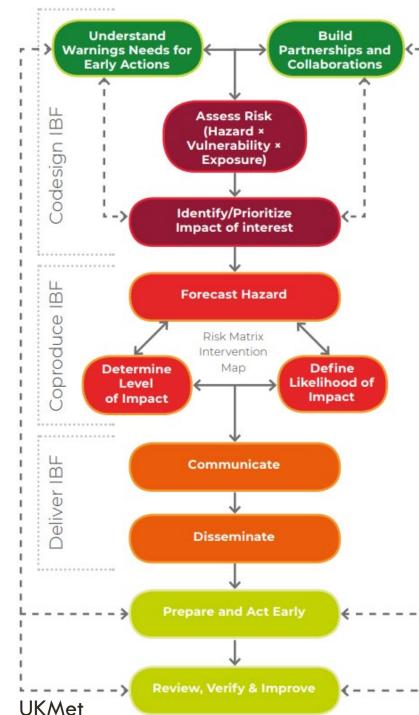
### LEARN TO MAKE USE OF FORECASTS

#### Conventional forecasts are hazard-specific.

Generate impact-based forecasts for compound hazards that go beyond simply predicting the probability or intensity of each single hazard.

### Standard disaster preparedness protocols can be inappropriate under compound risks.

Incorporate layers of flexibility to early action protocols, to give local actors more authority to act according to what makes most sense in light of a certain trigger.



### **REACH THE MOST VULNERABLE**

Vulnerable groups are often the hardest to reach during a disaster, and this can be exacerbated in complex compound disasters.

Communicate in native languages.

Make use of online training and communication platforms.

Be ready to deal with misinformation campaigns.

### CAPITALIZE ON ALIGNMENT IN HAZARD RESPONSE

Recognize and invest in synergies between COVID-19 risk mitigation and mitigation of other risks.

Mainstream COVID-19 safety measures that have improved hazard response in general.



### ELEVATE AWARENESS OF LOW PROBABILITY, HIGH IMPACT EVENTS

The more complex compound events become, the more limitations there are to conventional statistical approaches to risk assessment.

Use storyline-informed scenario planning exercises, co-designed by stakeholders and scientists across disciplines.

Increase risk awareness of unprecedented, compounding, and cascading hazards.

Recording of the roundtable: <u>https://community.wmo.int/activity-areas/health/Task-Team/activities</u>

BAMS Meeting Summary: <a href="https://journals.ametsoc.org/view/journals/bams/103/3/BAMS-D-21-0215.1.xml">https://journals.ametsoc.org/view/journals/bams/103/3/BAMS-D-21-0215.1.xml</a>

### THANK YOU