Assessing multi-hazard risk assessment capabilities of Early Warning Systems considering potential interactions among pandemics and natural hazards
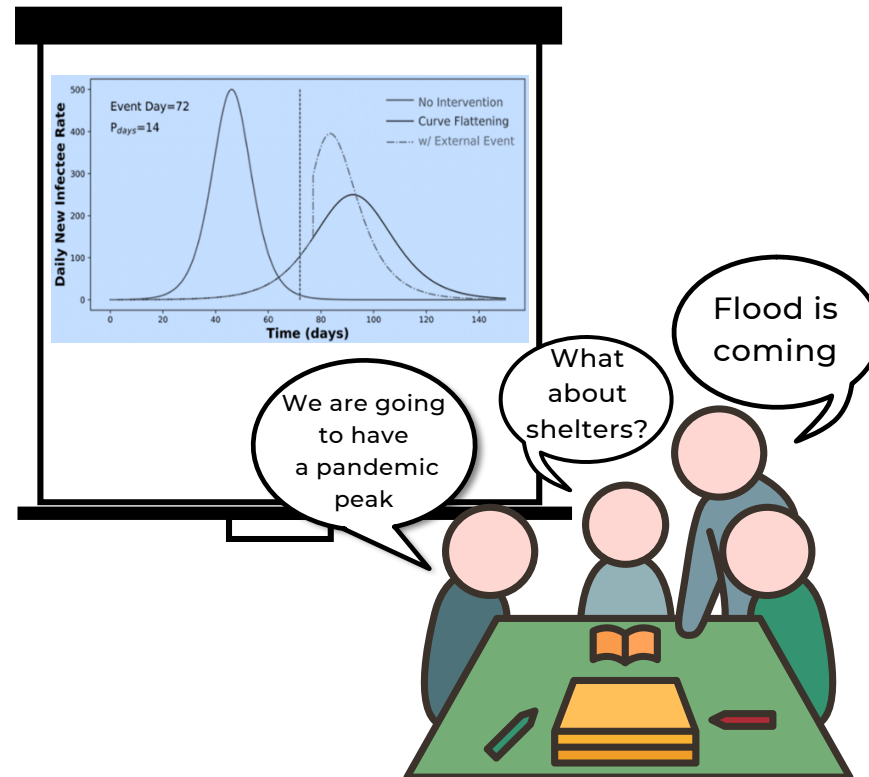
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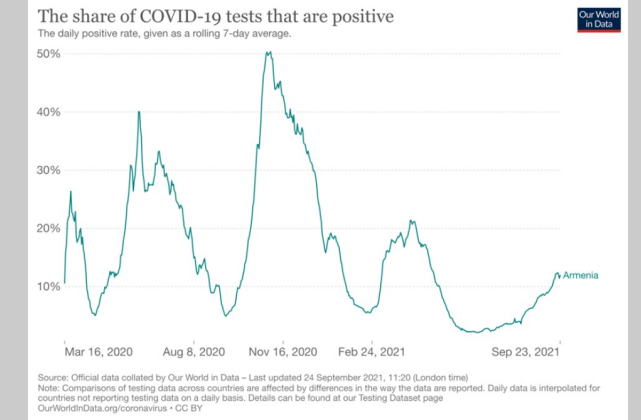# Roadmap

Results and validation

- Development of **19 indicators** clustered into **5 classes**
- **Qualitative evaluation by stakeholders** based on scores (0 to 5)
- Scores description and corresponding references asked as an optional column

Indicators classes

E. Pandemic and Multi-hazard	
	E1. Institutional mechanism and frameworks
	E2. Monitoring, analysis, and forecasting
	E3. Information dissemination and risk communication
	E4. Response capability
	E5. Multihazard EWS

- The Ministry of 'health' has several responsibilities

- Inadequate sampling and segregated risk language in reporting data

- Revolutionized warning dissemination?

- Unplanned, ad-hoc non pharmaceutical interventions

- No multi-hazard forecast, no multi-hazard emergency plan

Validation sources

The share of COVID-19 tests that are positive
The daily positive rate, given as a rolling 7-day average.

Source: Official data collated by Our World in Data – Last updated 24 September 2021, 11:20 (London time)
Note: Comparisons of testing data across countries are affected by differences in the way the data are reported. Daily data is interpolated for countries not reporting testing data on a daily basis. Details can be found at our Testing Dataset page
OurWorldInData.org/coronavirus • CC BY

1. Open source data
- share of positive COVID19 cases, stringency index
- share of vaccinated population
- open access governmental documents and plan for COVID19 emergency management

2. Multi-hazard management experience in the partner countries

3. Table top exercises

4. Other related indicators scores and their references provided by responders

Conclusion and recommended policies

To deal with multi-risk conditions include pandemics and natural hazards in the future:

- It is required to integrate data, information, and action plans in the context of EWS in both institutions, health, and civil protection

- Existing EWS assessment tools must be re-evaluated to make them more comprehensive and less subjective

- Without a validation mechanism, assessment tools would generate biased results.

Thank you

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