

# Science Advice at Times of Crisis: What Roles for Universities and Academies?

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# Science Advice at Times of Crisis:

## Novel Crisis



## Complex Crisis

- Natural
- Technological
- Humanitarian

## Stakeholders

- Policy makers
- Public
- Private/Public funding agencies
- Private/Public crisis managers

# Science Advice at Times of Crisis:

## The Role and Power of Data in a Crisis:

- Scientific evidence
- Data stewardship & open access/open data
- Reliable data
- “Data humility”
  - What is the limitation of the data?
  - uncertainties

## Communication

- What is the prevailing narrative?
- Trusted partner
- Key stakeholders informed in an appropriate and timely manner
- Update advice based on new data



Jose Carlos Fajardo/San Jose Mercury News,  
via Associated Press

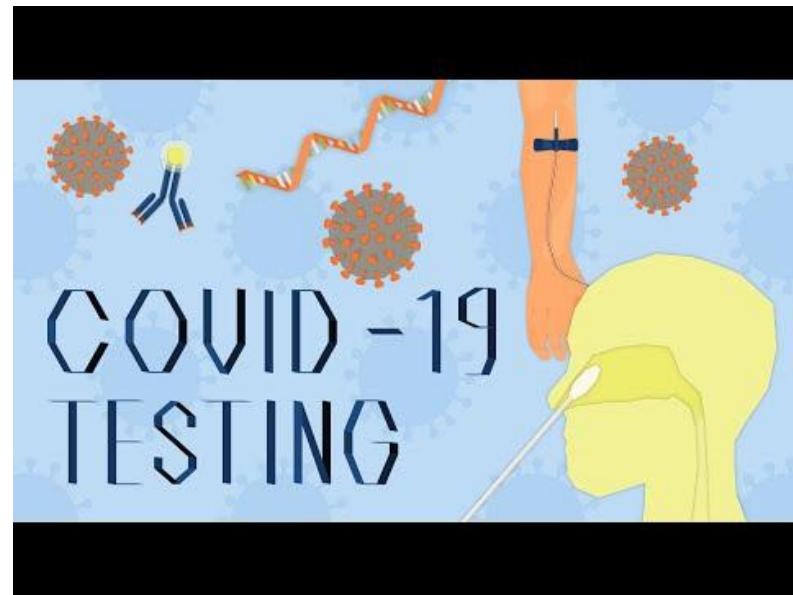


# Science Advice at Times of Crisis:

## COVID-19 Pandemic

- Testing
- Masking
- Social Distance
- Hand washing
- Vaccines

The Science behind How Coronavirus Tests Work



How do covid-19 tests work?

@sci\_toons

# Science Advice at Times of Crisis:

## Opioid Overdose Epidemic

- Awareness
- Educate recognition
- Empower Bystander response

Recognizing and Responding to an Opioid Overdose



Opioid Overdose Rescue: 5  
Ways to Save a Life

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# Science Advice at Times of Crisis:

## Challenges for the next crisis:

- Science misinformation/Fake news
- Science disinformation
- Social media engagement
- Information/media space
- How do you get through the crowd?
- How do we deliver the message?
- Institutional barriers

## What to do in the next crisis?

- Leverage technology
- Confront falsehoods
- ARIS—a trusted partner  
<https://researchinsociety.org/>
- First Draft News  
(<https://firstdraftnews.org/>)
- Data-driven crisis response plan
- Better integration of science advice with crisis management
- No one-size-fits-all solution