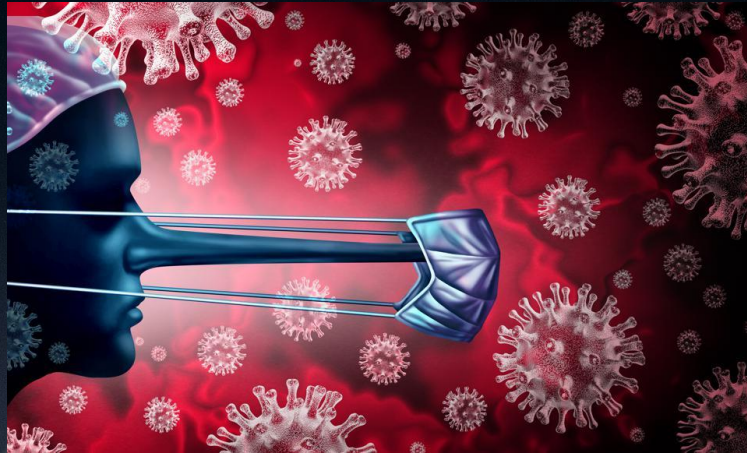


COVID Misinformation Spreads Because Many Don't Understand Maths

By Nancy Blachman

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GETTY Image, Forbes.com

Many very sick COVID-19 patients



GUSTAVO BASSO/NURPHOTO/GETTY IMAGES from Science.org

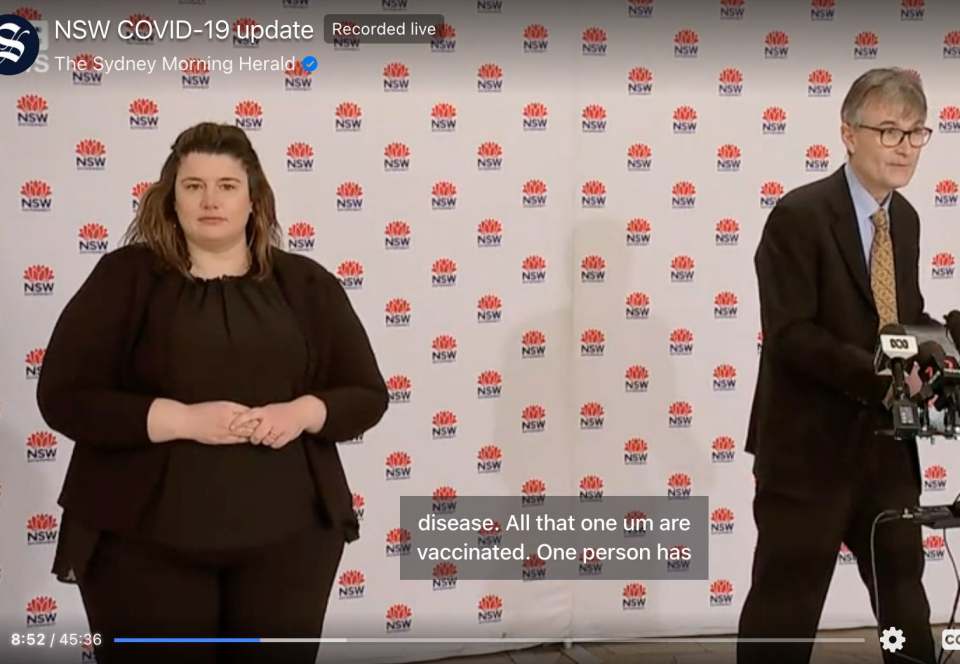
Daily COVID-19 Hospitalization Numbers

141 people

43 of them in intensive care
in New South Wales, Australia
July 25, 2021

In the ICU,

- 1 in their teens
- 7 in their 20s
- 3 in their 30s
- 14 in their 50s
- 12 in their 60s
- 6 in their 70s



Video www.facebook.com/watch/live/?ref=watch_permalink&v=178548430974349

**“All but one
are vaccinated.”**

On July 25, what Jeremy McAnulty, the director of health protection in New South Wales, Australia, said became a ***meme***.
(imitated and transmitted)

McAnulty had
misspoken,
saying
“vaccinated”
instead of
“unvaccinated.”



Image utswmed.org/medblog/covid-vaccine-holdouts/

But it was too late.

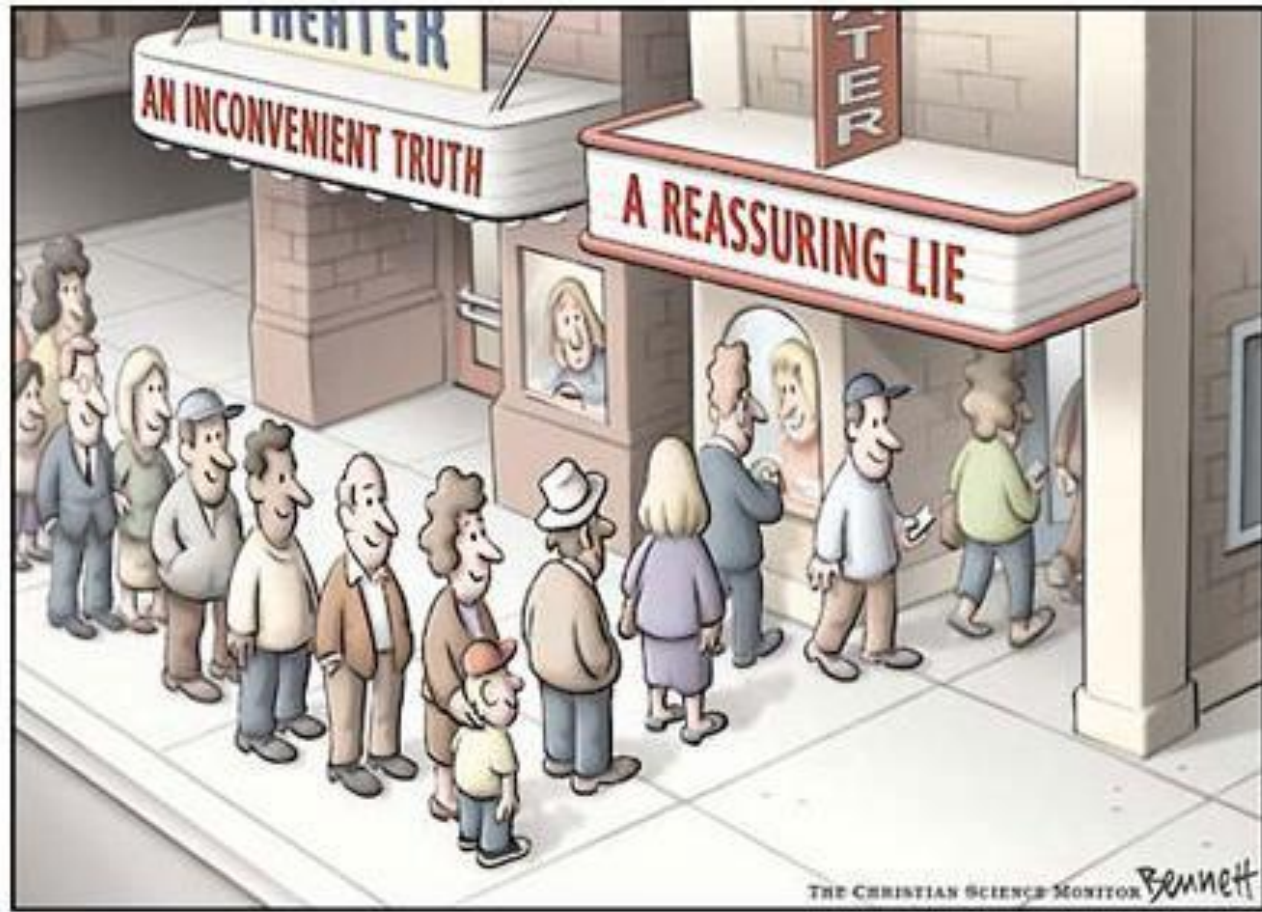
When he took questions a short while later, a reporter asked about his statement, and he said: “**I misspoke.**”

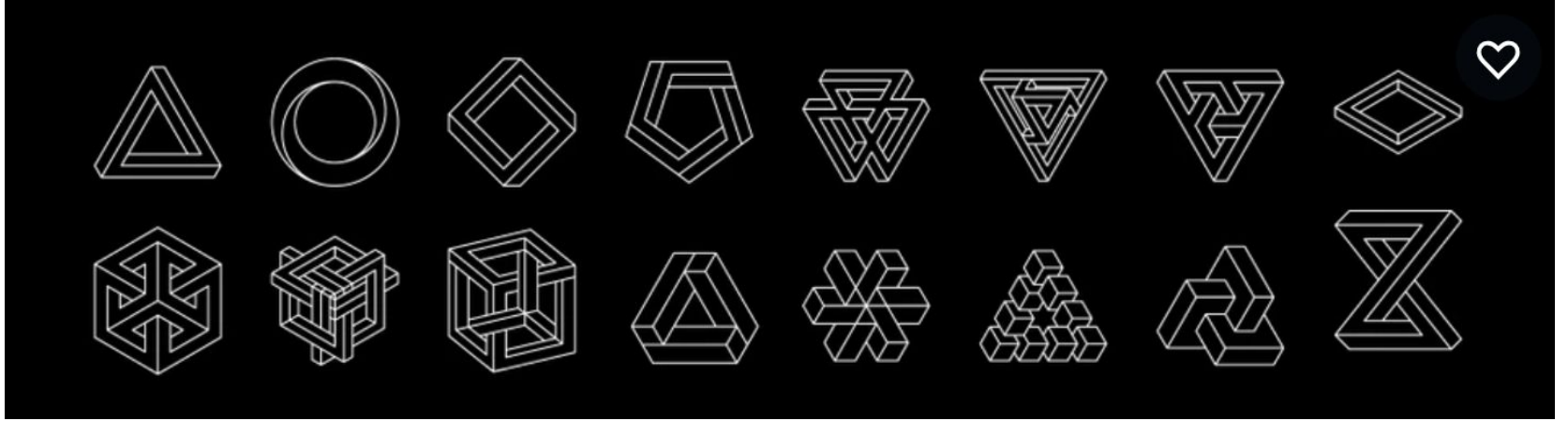
Of the **43 people in intensive care units,**
42 have *not* been vaccinated.”



Motivated reasoning

People believe something that is **mathematically nonsensical** because they want to **believe it.**





www.shutterstock.com/search/impossible

Why Effectively Impossible?

- At the time, most of New South Wales' population was **unvaccinated**.
- If the vaccines were totally ineffective, **unvaccinated** people were **equally likely** to be **hospitalized** as those who were **vaccinated**.
- Some **unvaccinated people** would have ended up **in the ICU**.
- But tens of thousands of people happily **believed otherwise**.

Social media spreads **misinformation** much **more rapidly** than the **truth**.

Falsehoods are **70%** more likely to be **retweeted** on Twitter than the truth, researchers found.

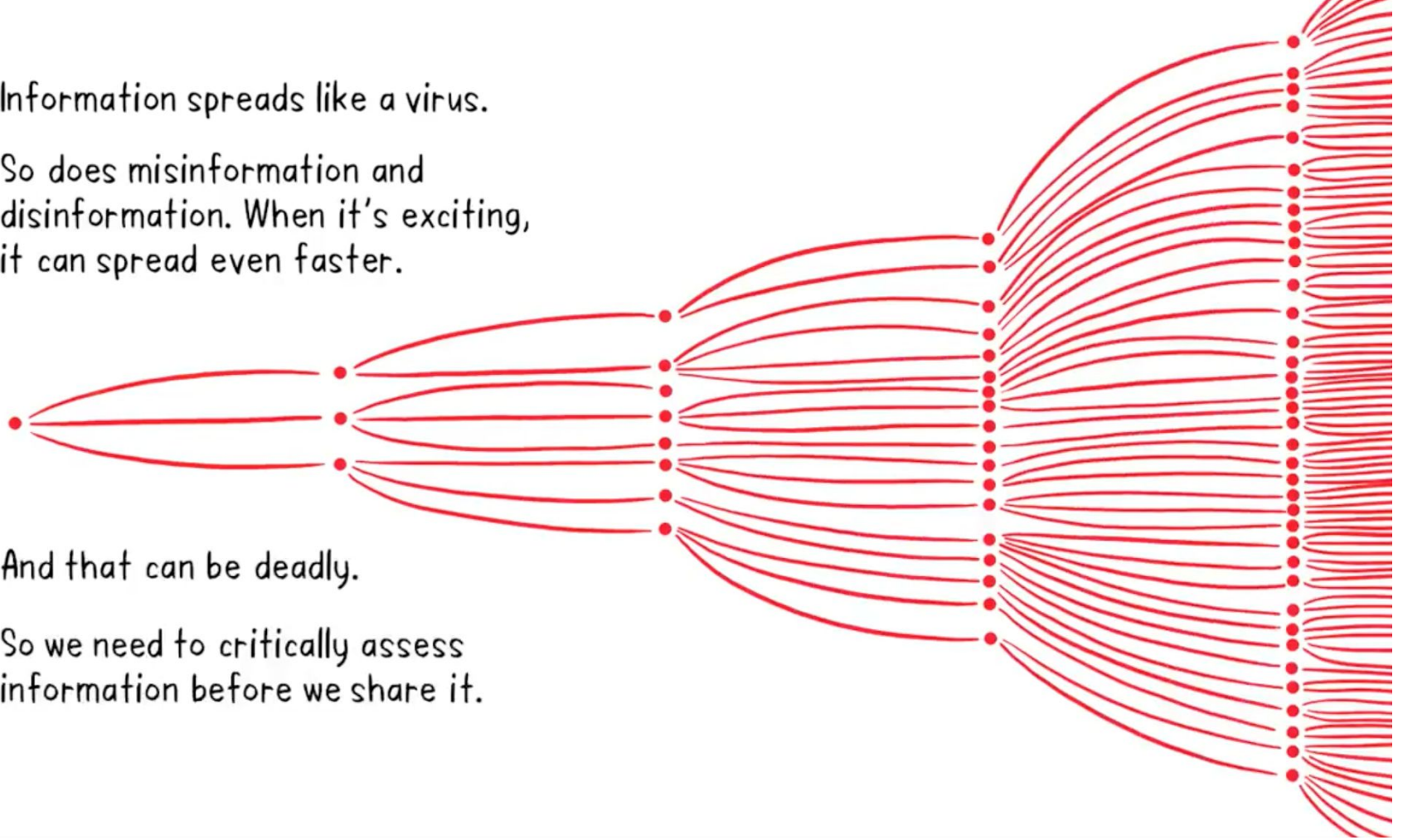
False news reached **1,500** people about **6** times faster than the truth.



Image: Jose-Luis Olivares, MIT, from MIT.edu

Information spreads like a virus.

So does misinformation and disinformation. When it's exciting, it can spread even faster.



And that can be deadly.

So we need to critically assess information before we share it.

Tips for navigating the infodemic.

Top tips for navigating the infodemic



1. Assess the source:

Who shared the information with you and where did they get it from? Even if it is friends or family, you still need to vet their source.



2. Go beyond headlines:

Headlines may be intentionally sensational or provocative.



3. Identify the author:

Search the author's name online to see if they are real or credible.



4. Check the date:

Is it up to date and relevant to current events? Has a headline, image or statistic been used out of context?



5. Examine the supporting evidence:

Credible stories back up their claims with facts.



6. Check your biases:

Think about whether your own biases could affect your judgment on what is or is not trustworthy.



7. Turn to fact-checkers:

Consult trusted fact-checking organizations, such as the International Fact-Checking Network and global news outlets focused on debunking misinformation.



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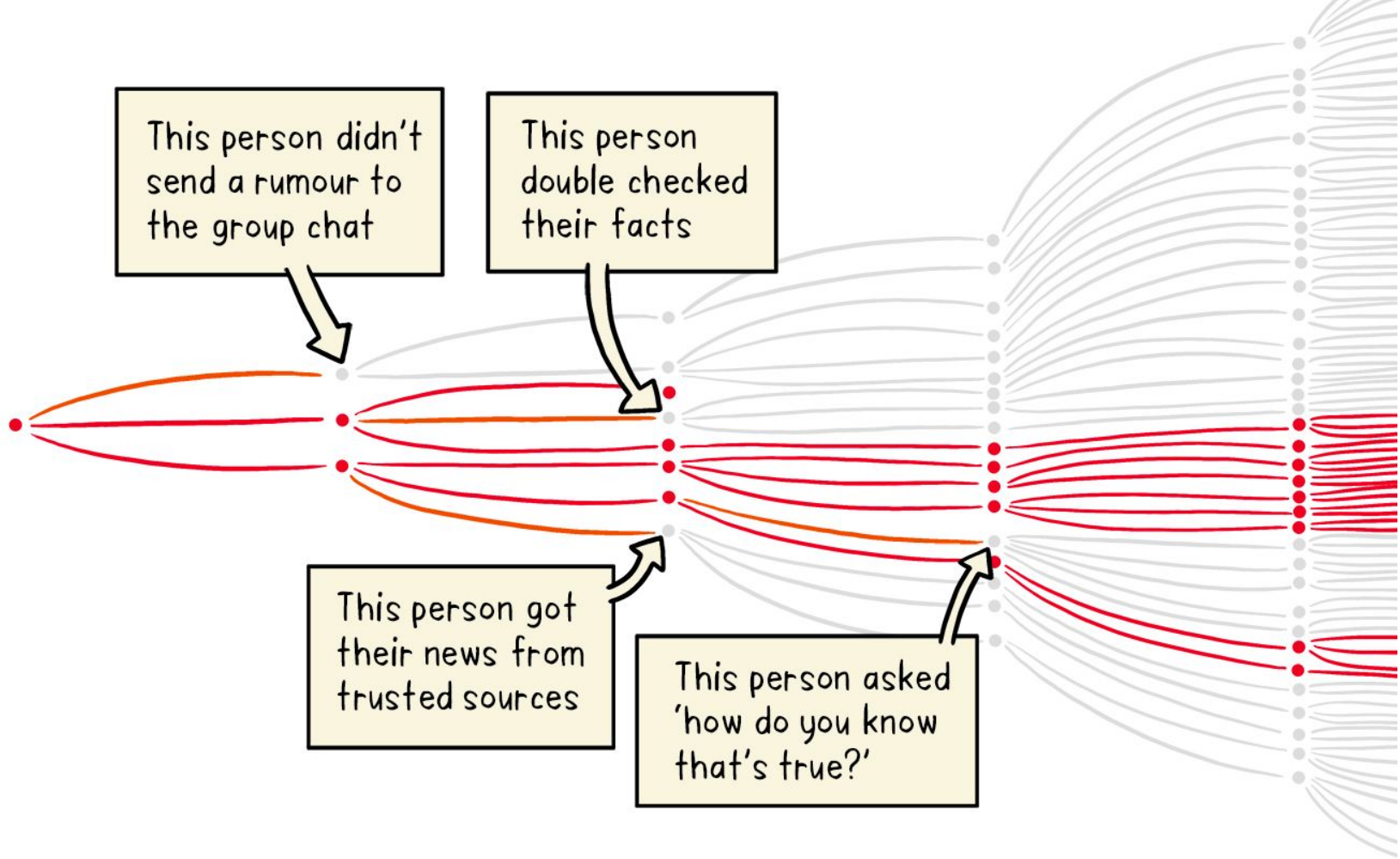
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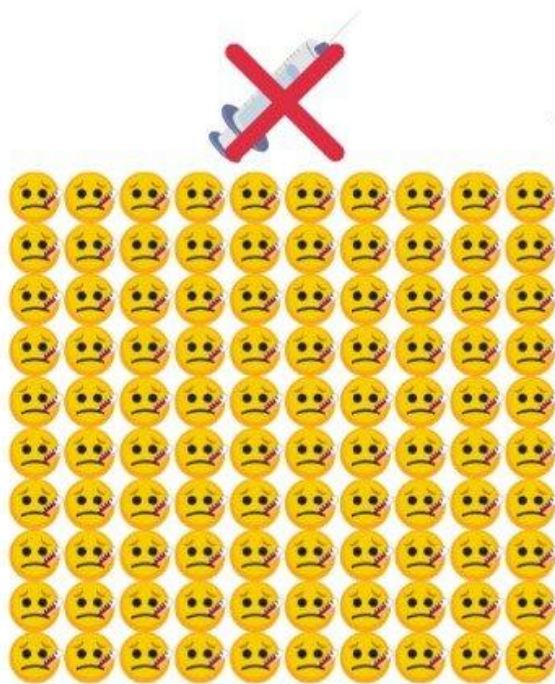


Excellent Protection

Since the numbers show that **vaccination** offers **excellent protection against hospitalization and death**, COVID skeptics and anti-vaxxers have become adept at **exploiting people's lack of understanding of statistics.**



What does '95% effective' mean?



vs.



If you take two equally large groups of people with diverse characteristics;

- one group is vaccinated and the other is not;
- we would expect there to be **95% fewer cases of symptomatic COVID-19 in the vaccinated group.**

What I want you to take away



- **Covid is spreading** because people believe and share **misinformation**.
- The **wealth and spread of misinformation** is due to people **getting and sharing** information from **non-traditional sources**.
- Together we can **stop** the spread of **misinformation**.
- We **must** educate people about **probability and statistics**.

What are you doing to combat misinformation?

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faculty.lsu.edu/fakenews/protect_yourself/fight-fake-news.php

