



The Double Whammy of Pandemic and Infodemic:

Applying Health Literacy and Clear Communication Principles to Overcome Misinformation

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About CommunicateHealth

Our mission:

- To improve lives by designing health information, products, and digital tools that are easy to understand and use



Agenda

Today we'll discuss:

- Misinformation, disinformation, and information sharing
- Health literacy in uncertain times and why misinformation tends to stick
- Clear communication principles and strategies for overcoming misinformation

**Information sharing is a natural
part of our communicative process.**



Ministry Feeds

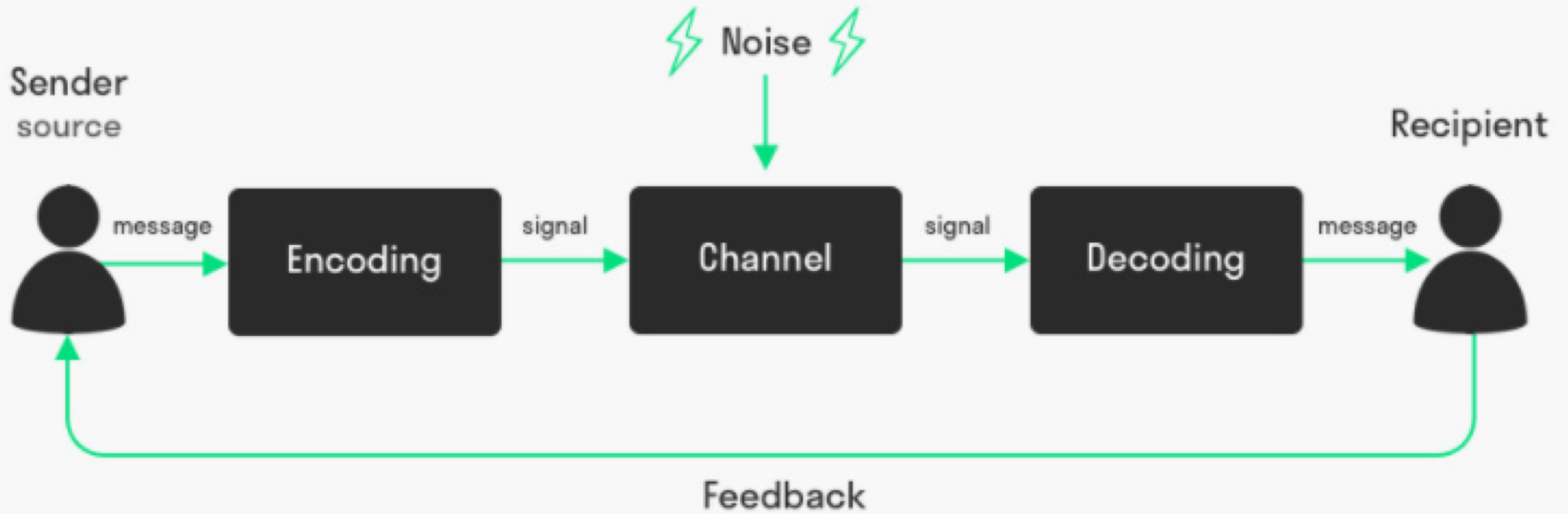


PHOTO ILLUSTRATION/THINK

The Chart



Stocksy United





Misinformation

Information that is wrong, misleading, or counter to scientific consensus. It may also be:

- Inaccurate
- Uncertain (more than 1 possibility)
- Vague
- Ambiguous (open to interpretation)

Karlova, N.A. & Fisher, K.E. (2013). A social diffusion model of misinformation and disinformation for understanding human information behaviour. *Information Research*, **18**(1) paper 573

Swire-Thompson, B. & Lazer, D. (2020). Public Health and Online Misinformation: Challenges and Recommendations. *Annual Review of Public Health*



Will Over Half A Million Sharks Be Killed for COVID-19 Vaccine?

A natural oil produced in shark livers is often — but not always — used in the manufacturing of vaccinations.

MADISON DAPCEVICH

PUBLISHED 9 OCTOBER 2020



Image via [Barry Peters/Public Domain](#)



Disinformation

Information that is deliberately deceptive, where the sender has malicious intent to misinform their audience. In health, it is usually:

- Personally or financially motivated
- Antagonistic

Karlova, N.A. & Fisher, K.E. (2013). A social diffusion model of misinformation and disinformation for understanding human information behaviour. *Information Research*, **18**(1) paper 573

Swire-Thompson, B. & Lazer, D. (2020). Public Health and Online Misinformation: Challenges and Recommendations. *Annual Review of Public Health*

Did Putin's Daughter Die After Taking COVID-19 Vaccine?

When tarot card readings are cited as credible evidence, all bets are off.

DAN EVON

PUBLISHED 17 AUGUST 2020



Russia has developed first coronavirus vaccine. Watch Putin's daughter gets first COVID-19 vaccine....

Like Comment Share ...

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Misinformation and disinformation are inherently **informative** — but the consequences can be severe.



**We are living with stress and
uncertainty.**



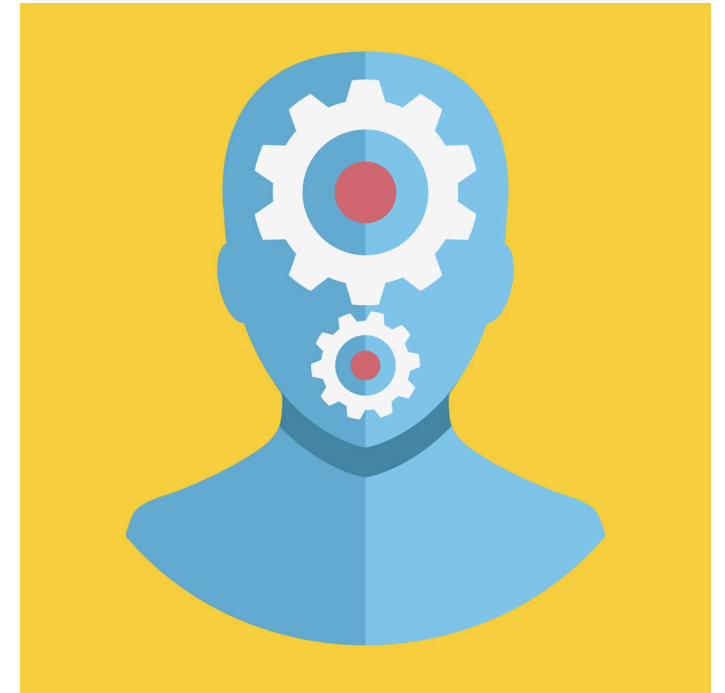
Uncertainty Management Theory (Brashers)

We all **react differently** to uncertainty. We tend to manage uncertainty in 4 ways:

- Adapt
- Rely on social support to cope
- Balance the need to know with the desire not to know
- Learn which information to trust and which to ignore

Meaning-making machines

- We experience the world through our own (subjective) lens
- We try to make sense of what is happening around us, in the context of our belief and value systems
- We seek out information to advance our knowledge and reduce uncertainty





According to a 2016 Pew Research Center study:
64% of adults believe fake news stories cause a great deal of confusion, and **23%** said they had shared fabricated political stories themselves — sometimes by mistake and sometimes intentionally.



It's easy to be influenced by health misinformation.

- Our brains are biased toward acceptance and retention — and we tend to point out misinformation after the fact!
- Most adults have limited health literacy skills — and they may struggle to identify misinformation.
- Fake experts and bad actors can share false information with a great deal of certainty.



During a pandemic we are particularly susceptible to influence.

- Fear of the unknown leaves us looking for guidance and sometimes reaching our own conclusions.
- Scientific evidence takes time and will likely develop or change throughout a public health crisis.
- We have biases when searching for information — yet we don't totally control what we're exposed to.

Clear communication can reduce or even overcome the effects of misinformation.



Cognitive factors of misinformation

Although misinformation can be spread inadvertently or on purpose, **no one wants to be misinformed**. Yet misinformation has some predictable psychological effects, including:

- Continued influence effect
- Familiarity backfire effect
- Overkill backfire effect
- Worldview backfire effect

Continued Influence Effect

Despite a retraction, people continue to rely on misinformation



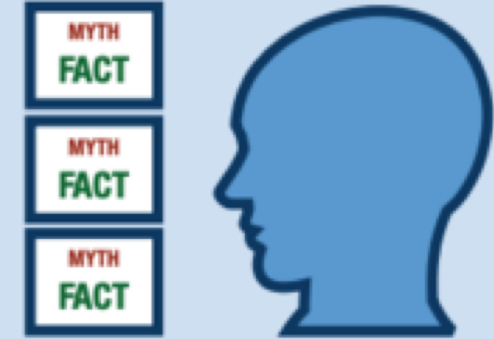
Alternative Account

Alternative explanation fills gap left by retracting misinformation



Repeated Retraction

Strengthen retraction through repetition (without reinforcing myth)



Simply retracting or flagging misinformation is **not enough**. Always explain:

- How or why we know the information is false
- What we know is true instead (fill the information gap)

Familiarity Backfire Effect

Repeating the myth increases familiarity, reinforcing it



Emphasis on Facts

Avoid repetition of the myth; reinforce the correct facts instead



Preexposure Warning

Warn upfront that misleading information is coming



New evidence suggests **backfire effects aren't as common as once thought**, so don't be afraid to debunk!

- State the myth but repeat the facts!
- Use the **inoculation** communication strategy: warn that misinformation may be coming and refute it in advance.

Overkill Backfire Effect

Simple myths are more cognitively attractive than complicated refutations



Simple, Brief Rebuttal

Use fewer arguments in refuting the myth — less is more



Foster Healthy Skepticism

Skepticism about information source reduces influence of misinformation

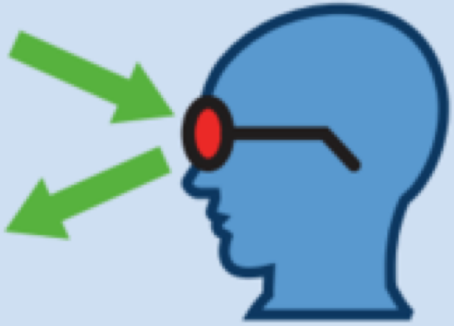


We're drawn to information we **perceive as easy to understand**. We can also build our health literacy skills:

- Keep it simple and use plain language. Use familiar examples.
- Provide clues about what to look for when assessing health information.

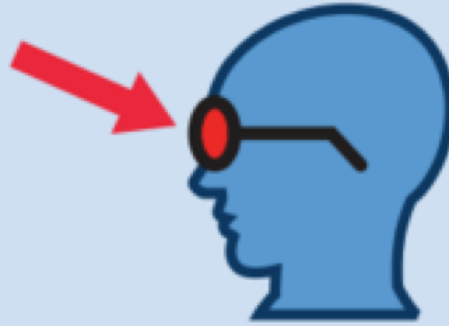
Worldview Backfire Effect

Evidence that threatens worldview can strengthen initially held beliefs



Affirm Worldview

Frame evidence in worldview-affirming manner by endorsing values of audience



Affirm Identity

Self-affirmation of personal values increases receptivity to evidence



Know your audience and **tailor your messages** to be consistent with their worldview. Corrective information should:

- Use inclusive and empathetic language
- Come from an “in-group” messenger, when possible, to boost credibility

Health literacy plays a key role in preventing the negative consequences of misinformation.

THE TRUTH

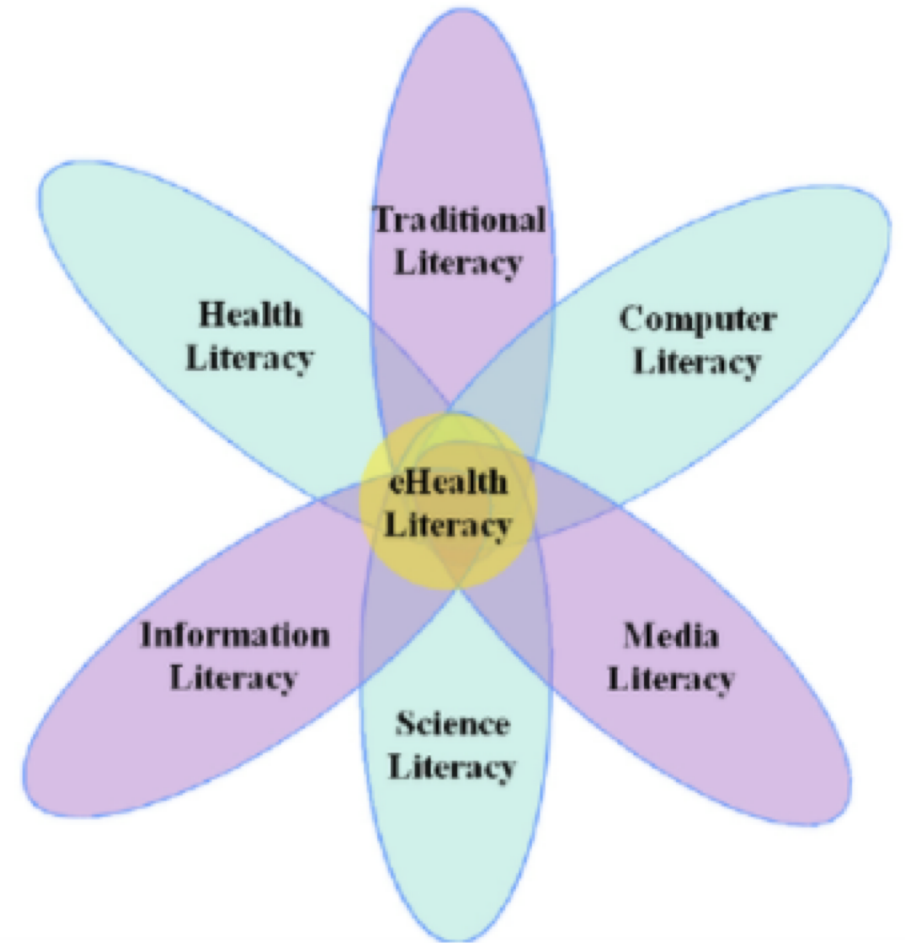


IGNORE THAT - SOCIAL
MEDIA TELLS ME THAT THE
TRUTH IS A CONSPIRACY
TO KEEP US IN OUR PLACE.



Digital Health Literacy

Also known as eHealth literacy, digital health literacy is the ability to access, understand, and use health information from electronic sources.



Science Literacy

Understanding basic scientific concepts, including the concept of scientific uncertainty

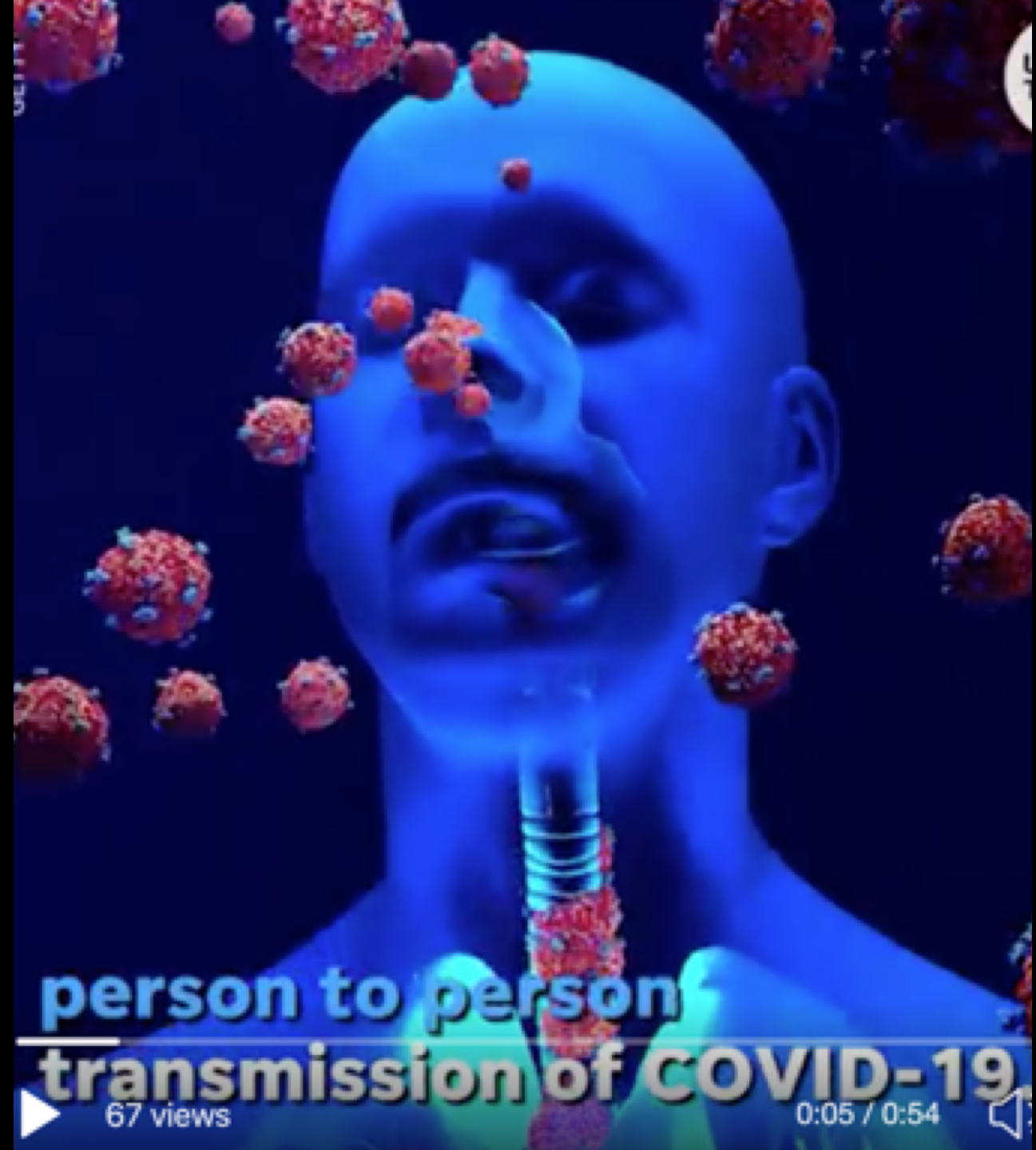
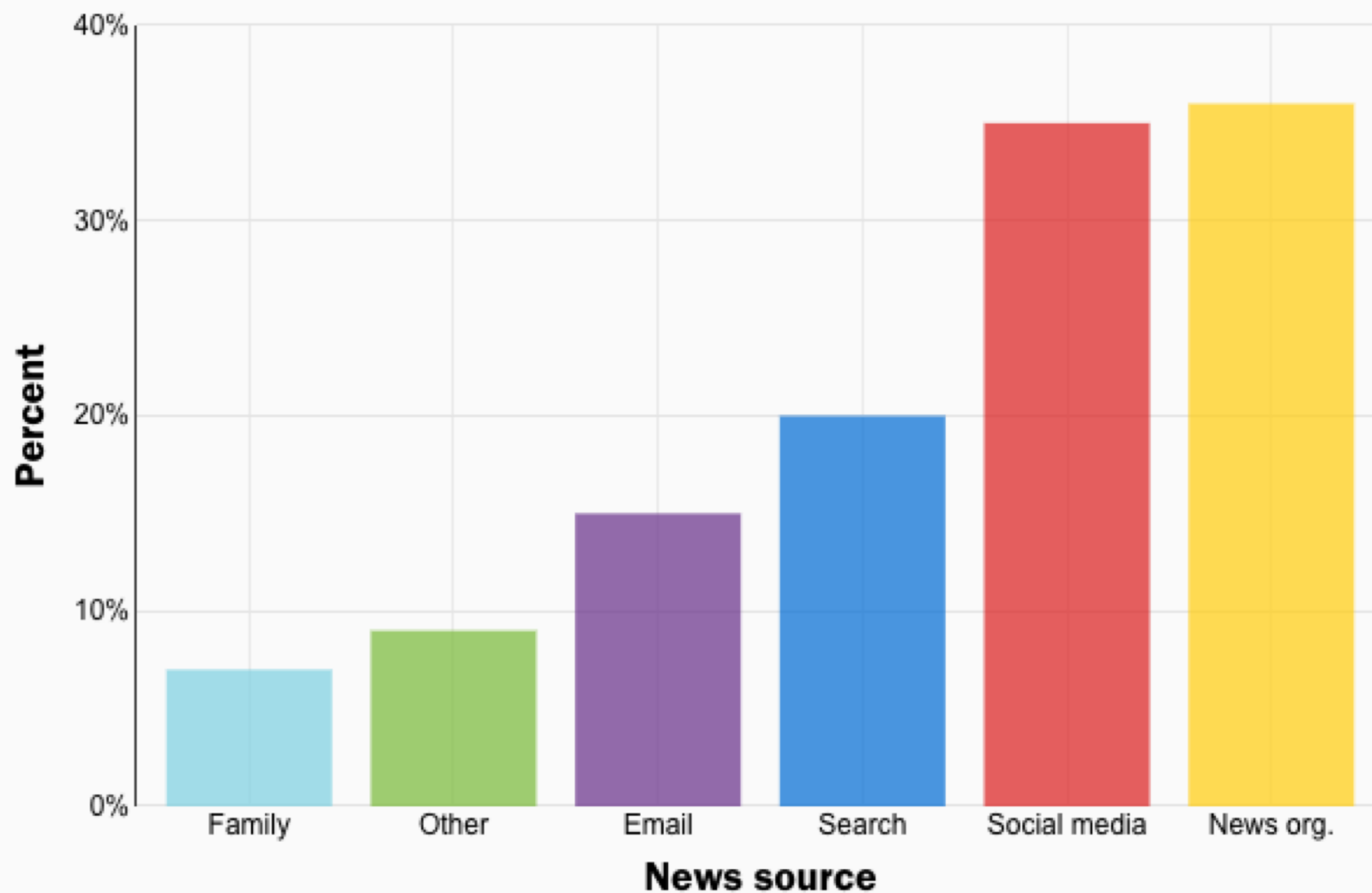


Figure 1: Where people get online news in the US, 2017



Pew Research Center, "How Americans Encounter, Recall, and Act Upon Digital News," February 9, 2017.

BROOKINGS

Healthy skepticism and critical thinking skills

The National Library of Medicine (NLM) guides readers to consider the following to help them find credible health information online:

Factors	Question to ask
Authority	<ul style="list-style-type: none">• Does the website address end in .gov or .edu?• Are there links to reputable sources or well-known organizations?
Bias	<ul style="list-style-type: none">• Is the website pushing a single point of view?• Are ads clearly marked?• Does it use provocative language, like “shocking” or “beware”?
Current	<ul style="list-style-type: none">• Are there dates anywhere on the page?• How recently was it updated?



Communicate in a way that builds trust

Trust is built over time. To develop trust among your target audience:

- Be clear — keep it simple, easy to read, and easy to remember
- Be empathetic — don't minimize, acknowledge feelings
- Be credible — explain what you know and don't know
- Be picky — choose your misinformation battles wisely

How can I keep my family safe during the pandemic?

The best thing you can do is have everyone in the family **stay home as much as possible**. That's because the more you're around other people, the more likely you are to get sick.

If you do need to go out, try to stay out for as little time as possible. To protect your family from COVID-19, it's also important to:



Wear a mask that covers your nose and mouth and fits snugly (except for kids younger than 2)



Avoid touching your face



Try to stay at least 6 feet away from other people



Should I wear a mask?

Yes. The CDC recommends that you wear a cloth mask when you go out in public. This is a change from guidance you may have heard before. It's based on new information that people can spread the virus even when they don't feel sick.

It's still important to stay at least 6 feet away from other people and wash your hands with soap when you get home.

Parenting During the Pandemic

How to protect your family from COVID-19



As a parent, you're always thinking about how to keep your child safe and healthy. This may seem hard during the COVID-19 pandemic since even experts are still learning about the disease. But it's important to know how to help keep your family from getting COVID-19 — and what to do if someone in the family does get it.

Health messages can be crafted to address and overcome misinformation.



Strategies for corrective messages

Using **plain language** is the key to writing messages that are clear and easy to understand.

You can also use these strategies to address misinformation:

- Warnings and inoculation (or “pre-bunking”)
- Truth sandwich
- Message map

Inoculation, or pre-bunking, uses **priming** to put readers on guard for misinformation.



Nearly all climate scientists — 97% — have concluded that human-caused climate change is happening. Some politically-motivated groups use misleading tactics to try to convince the public that there is a lot of disagreement among scientists. However, scientific research has found that among climate scientists “there is virtually no disagreement that humans are causing climate change”.

van der Linden, S., Leiserowitz, A., Rosenthal, S., & Maibach, E. (2017). Inoculating the public against misinformation about climate change. *Global Challenges*, 1(2), 1600008.

The truth
sandwich uses
repetition to
make the facts
more familiar
than the myth.



FACT

Lead with the fact if it's clear, pithy, and sticky—make it simple, concrete, and plausible. It must “fit” with the story.

WARN ABOUT THE MYTH

Warn beforehand that a myth is coming... mention it once only.

EXPLAIN FALLACY

Explain how the myth misleads.

FACT

Finish by reinforcing the fact—multiple times if possible. Make sure it provides an alternative causal explanation.

Evidence shows that the drug hydroxychloroquine can't protect people from getting COVID-19. But President Trump has said many times that he believes the drug works.

The problem is that he has no proof. In fact, studies so far have shown that the drug can't prevent COVID-19 — and it may cause dangerous side effects.

When PTSD isn't treated, it usually doesn't get better — and it may even get worse.

It's common to think that your PTSD symptoms will just go away over time. But this is very unlikely, especially if you've had symptoms for longer than a year. Even if you feel like you can handle your symptoms now, they may get worse over time.

Getting treatment can help keep PTSD from causing problems in your relationships, your career, or your education — so you can live the way you want to.



Message maps help
ensure **consistency**
across your
communications —
which is key to
credibility.

Get Ready for Mosquito Season

No one likes mosquito bites! They're itchy and uncomfortable — and, even more importantly, mosquitoes can carry serious diseases like the West Nile virus. The good news is that you can protect yourself and your children from West Nile and other diseases spread by mosquitoes. Start by controlling mosquitoes inside and outside your home, using insect repellent, and wearing protective clothing.

Take steps to control mosquitoes inside and outside your home.

- Use screens on windows and doors. Repair holes in screens to keep mosquitoes outside.
- Use air conditioning when available. Sleep under a mosquito bed net if air conditioned or screened rooms are not available — or if you're sleeping outdoors.
- Once a week, check things near your home that hold water — for example, tires, buckets, planters, toys, pools, birdbaths, flowerpots, or trash containers. Empty and scrub, turn over, cover, or throw them out. Be sure to check inside and outside your home. This helps keep mosquitoes away because they lay eggs near standing water.

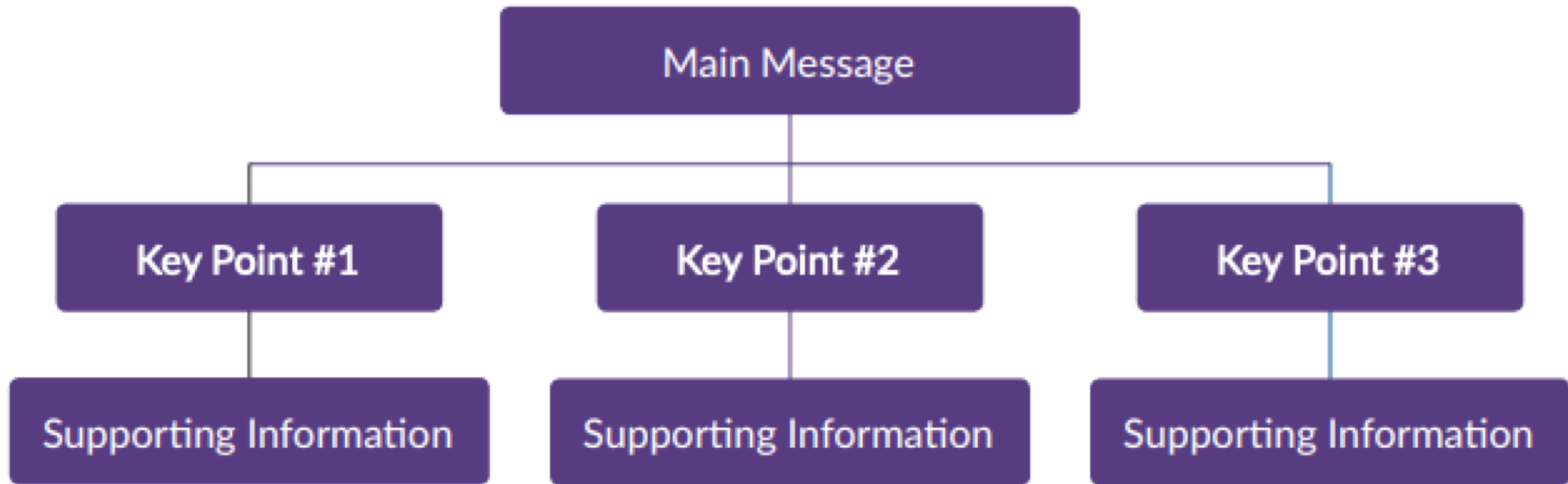
Use insect repellent.

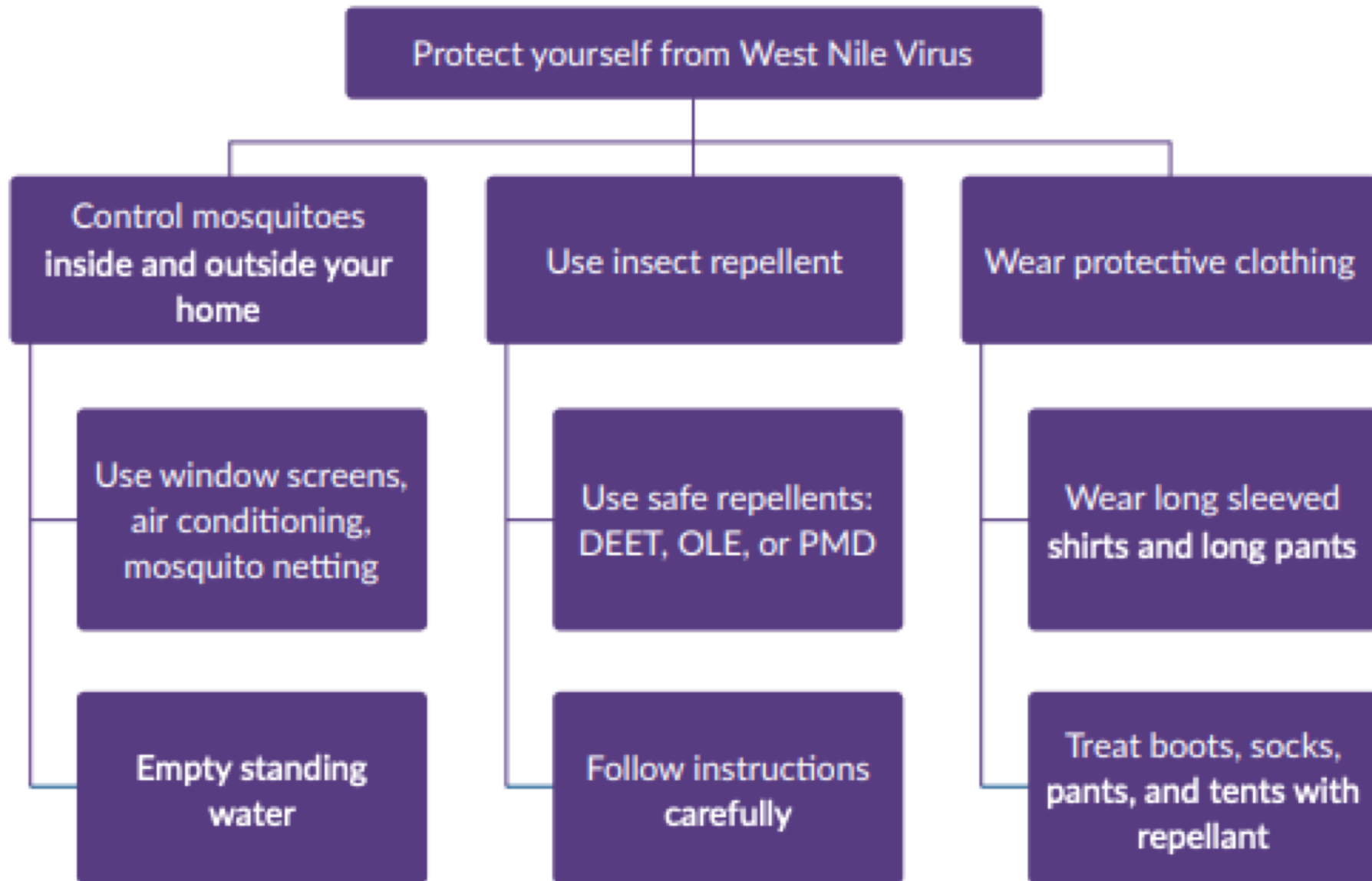
- Use repellents with the active ingredients registered by the Environmental Protection Agency (EPA), like DEET. [You can learn more from EPA.](#)
- Follow instructions carefully. When used as directed, this repellent is safe for children over 2 months, as well as pregnant and breastfeeding women.

Wear protective clothing.

- Wear long sleeved shirts and long pants.
- Treat boots, socks, pants, and tents with permethrin.
- Dress your child in protective clothing and cover strollers and baby carriers with mosquito netting.

[Learn more about preventing mosquito bites from CDC.](#)







Additional Resources

- [The Debunking Handbook 2020](#) (Hot off the press!)
- 2nd Edition of [Health Literacy Online](#)
- National Library of Medicine's [digital health literacy resources](#)
- CDC's [Crisis and Emergency Risk Communication \(CERC\)](#) resources
- CDC's [National Center for Environmental Health Clear Writing Guide](#)



Discussion & Questions

Use the chat feature to ask questions
or share comments.