

Modes and Means of Strategic Risk Communication

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Sgę: noʔ aswadagyáʔte:

Cornell University is located on the traditional homelands of the Gayogohó:nq' (the Cayuga Nation). The Gayogohó:nq' are members of the Haudenosaunee Confederacy, an alliance of six sovereign Nations with a historic and contemporary presence on this land. The Confederacy precedes the establishment of Cornell University, New York state, and the United States of America. We acknowledge the painful history of Gayogohó:nq' dispossession, and honor the ongoing connection of Gayogohó:nq' people, past and present, to these lands and waters.

<https://gayogohono-learning-project.org/>

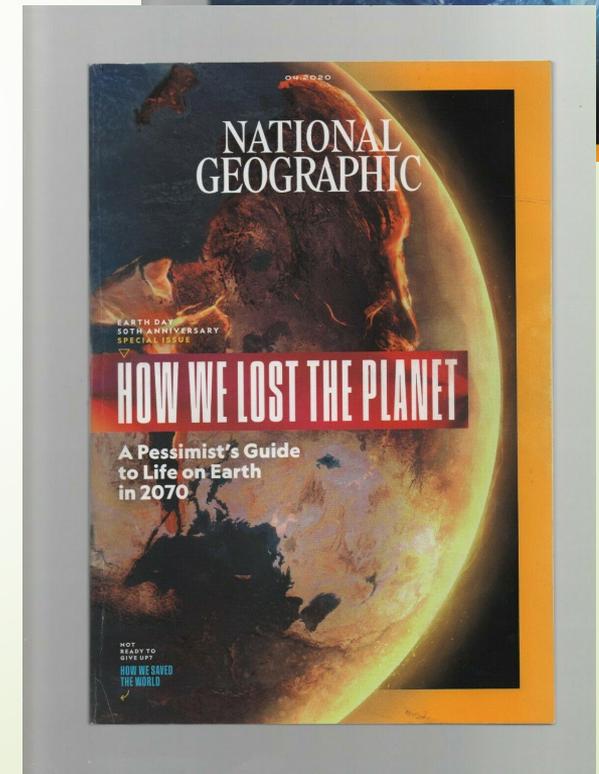
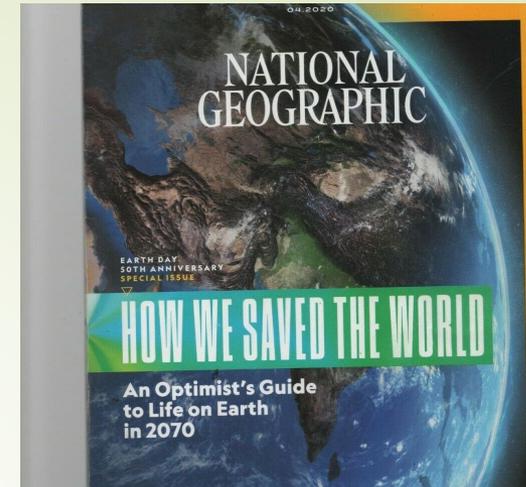
<https://blogs.cornell.edu/cornelluniversityindigenousdispossession/>

<https://www.cornell.edu/indigenous/>

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Today's Talk

- Overview of Risk Communication
- Key Considerations & Takeaways



What Is Risk Communication?

An iterative process among scientists and non-scientists about risk assessment, risk characterization, risk management and risk policy.

- ▶ Includes purposeful and unintentional messages about risk,
- ▶ Is multi-directional,
- ▶ Encompasses verbal and nonverbal cues, and
- ▶ Occurs at personal, group, organizational, community, and societal levels.



Effective Risk Communication Starts with Questions

- What is the problem?
- Who is it affecting?
- When is it occurring?
- Where is it occurring?
- Why is it a problem that needs a response?
- What is the goal of our efforts?



In Turn...

- ▶ Characteristics of the
 1. Audience
 2. Message
 3. Channel
- ▶ Social, cultural, economic, and political context
- ▶ Nature of the risk.....**will influence responses to strategic risk communication**

But Wait, There's More...

Other Considerations

- Ethics
- Complexity of the information
- Uncertainty of science
- Unintentional risk messages
- Effect of multiple messengers
- Conflicting messages
- Media coverage
- Etc.

One Final Note....

- Conservation communication is often asymmetrical and downstream

“Conservation professionals have moral, pragmatic, and legal obligations to engage ethically in their research and practice and protect people [and animals] from harm and unintended consequences.”

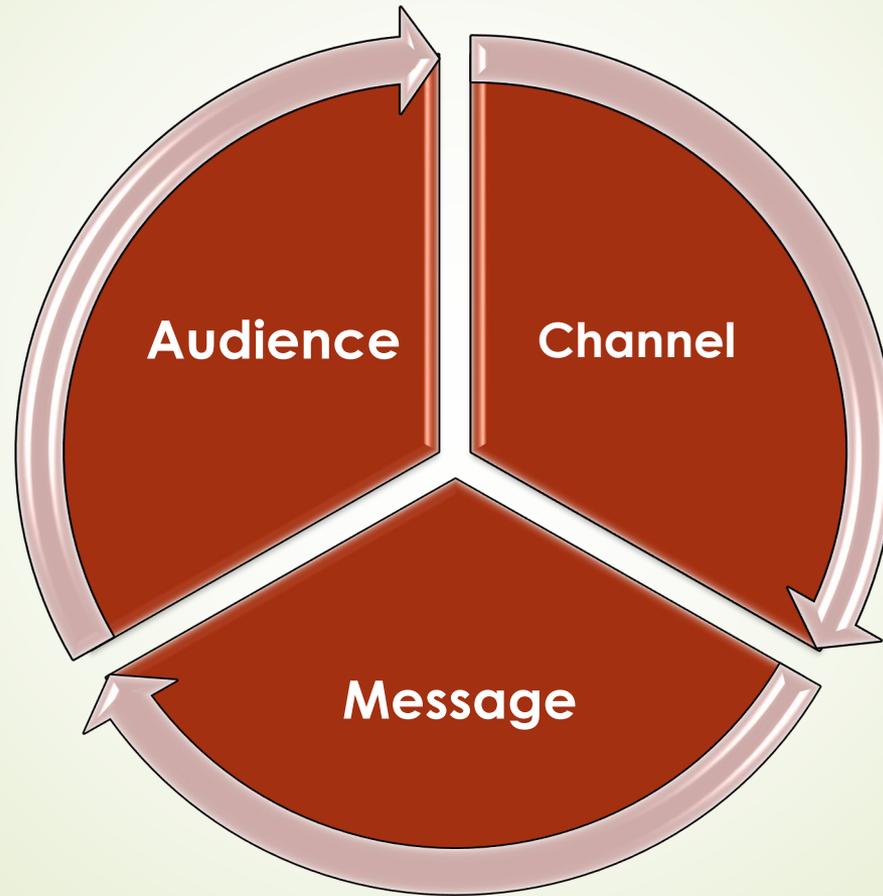
(Gregg et al., 2021; Alshurideh et al., 2016; Brittain et al., 2020)



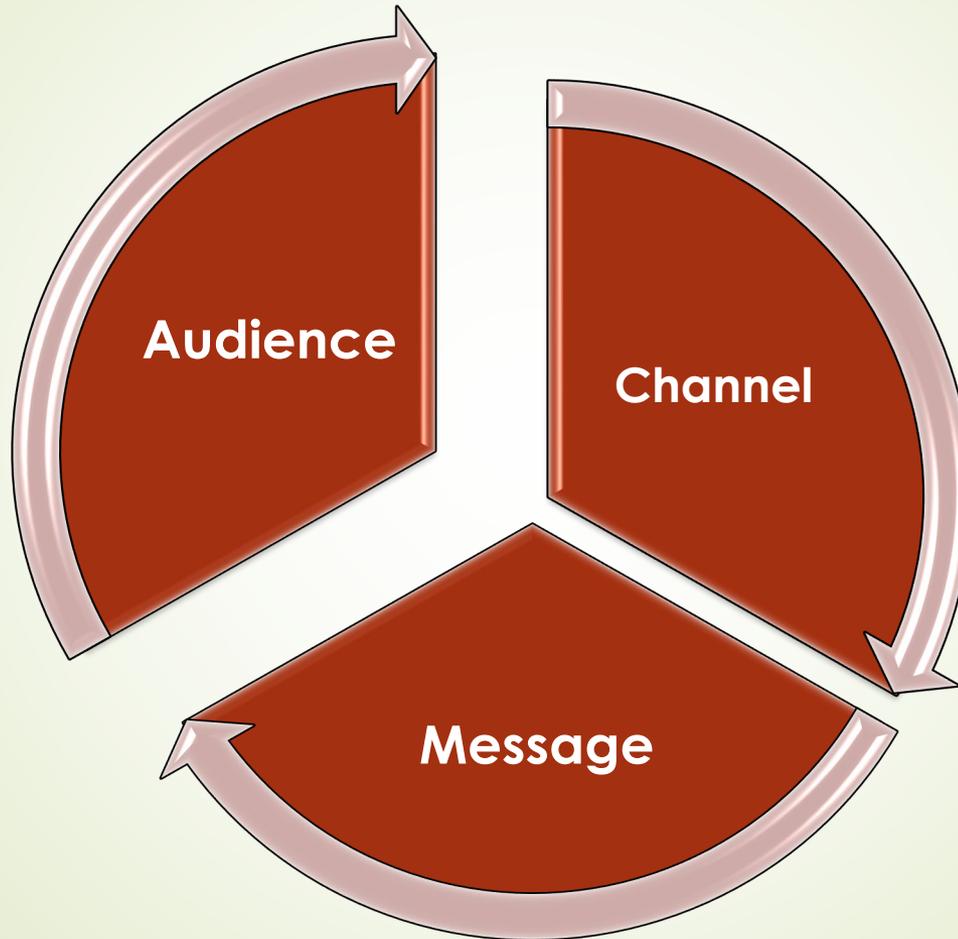
Activity #1

How many of you engage in risk communication in your roles?

Communication Considerations



Audience Characteristics



What are your target audiences' motivations and barriers to undertake what you are asking them to do?

Some Motivations and Barriers

- Risk perceptions, heuristics, and biases
- Knowledge
- Attitudes
- Current behaviors
- Ability to do what you're asking them to do (a.k.a., efficacy or agency)
- Social norms
- Sense of place

What are Risk Perceptions?

- Risk perceptions involve individuals' subjective evaluations of risk.
- They can be informed by "objective" risk but also include other qualitative factors (see, e.g., Slovic, 1987).



Factors Influencing Risk Perceptions

- ▶ Observable
- ▶ Knowledge of exposure
- ▶ Has immediate or delayed effects
- ▶ Known to science
- ▶ Controllable
- ▶ Dreaded (“gut reaction”)

- ▶ Equity
- ▶ Risk to future generations
- ▶ Increasing/decreasing
- ▶ Voluntariness
- ▶ Easily reduced

(Slovic, 1987)



Asian giant hornet (*Vespa mandarinia*) "Murder Hornet"

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Why Do Risk Perceptions Matter?

Understanding how people assess risk may help communicators predict their concern and identify risk communication strategies.

Heuristics and Biases

- ▶ People rely on “heuristic principles” or intuitive “rules of thumb” when assessing the probability of an event occurring (Tversky & Kahneman, 1974)
- ▶ These influence risk perceptions and how we react to risk information

THINKING,
FAST AND SLOW



DANIEL
KAHNEMAN

WINNER OF THE NOBEL PRIZE IN ECONOMICS

Availability Heuristic

- People assess the frequency or probability of an event by the ease with which instances or occurrences come to mind

The New York Times

GLOBAL HEALTH

The Forgotten Virus: Zika Families and Researchers Struggle for Support

Some babies born with devastating birth defects from the mosquito-borne illness are 7 now, but Covid turned the world's attention away.



Aedes mosquito, carrier of the Zika virus.

Scarcity Heuristic

- ▶ Items or commodities perceived to be scarce are often more desirable and valuable
- ▶ E.g., Hurry while supplies last!



(Tversky & Kahneman, 1974)

Affect Heuristic

- Quick, automatic evaluation of the “goodness” or “badness” of a stimulus (Slovic et al., 2004)
- Occurs prior to more elaborative, mindful judgments
- Can drive perceptions of risk



Feral swine

- People's affective reactions drive them to give greater weight to a single victim than a group of victims.
- The value of an individual life creates empathy
- "People are much more willing to aid identified individuals than unidentified or statistical victims" (Slovic, 2007, p. 88)



Mute Swans

“Identified Victim” Effect



Audience Interest – Don't take it for granted

- People are more likely to listen and seek information when they...
 - Recognize that there is a problem - **awareness**
 - Feel some connection to the problem - **relevance**
 - Believe they can do something to solve the problem – **self-efficacy**
 - Believe that people important to them would want them to know about the risk issue - **norms**

Social Norms

Leverage Social Norms

- Descriptive and Injunctive
- Successful for promoting pro-environmental behavior

(Farrow et al 2017)

Stop the spread of Rapid Ohia Death!
Join 61 % of Pololu Valley Trail users who have begun to use a boot brush station.

Protect our forests from invasive species and disease.

BEFORE and AFTER visit, please also:

CLEAN YOUR GEAR



Brush off all dirt from shoes and gear. Spray with 70% rubbing alcohol.

CLEAN YOUR VEHICLE



Remove all soil. Wash tires and undercarriage with detergent.

Consider People's "Sense of Place"

- ▶ People's attachment to and satisfaction with their community can influence their willingness to engage.
- ▶ People are more willing to fight for places more central to their identities and that they perceive as threatened (Stedman, 2002).





Takeaway #1

Understand your audience and target your messages to them

Additional considerations....

- Be reflexive
- Be aware of power
- Engage responsibly
- Target audiences fairly

Activity #2a

Who are the audiences you engage with in your work?



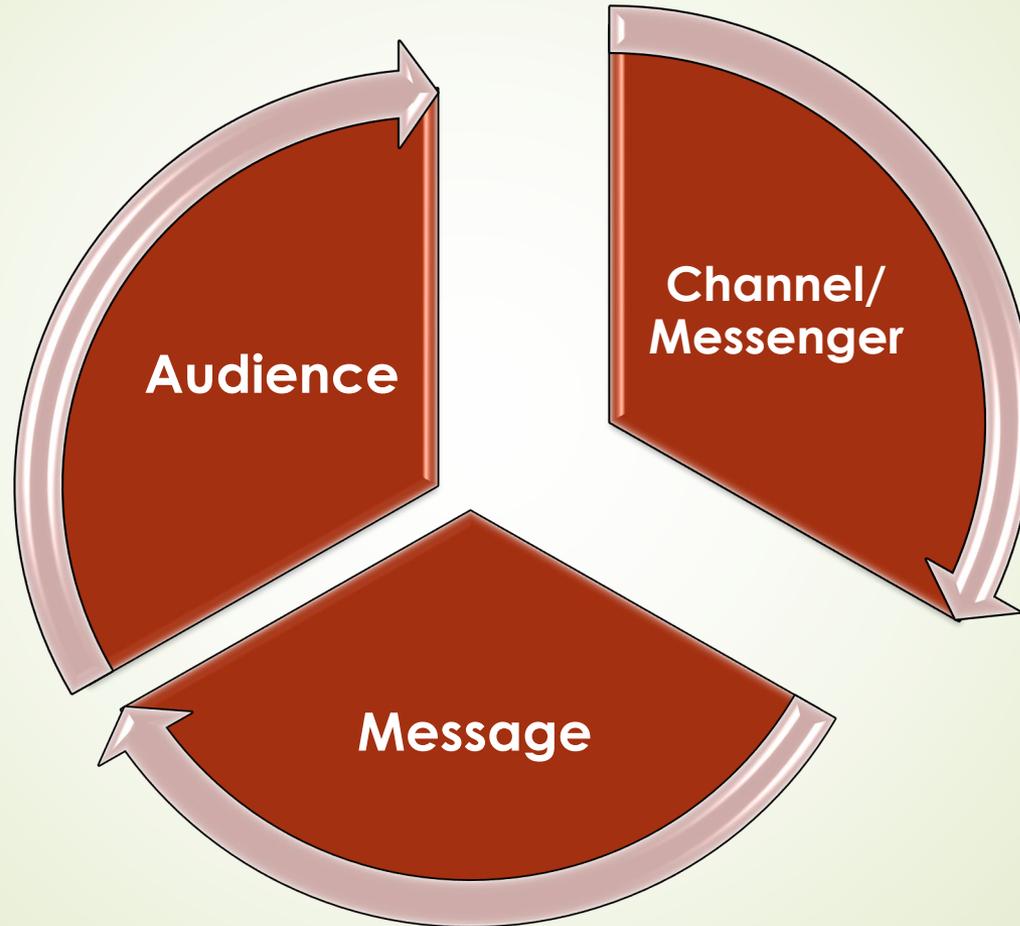
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Activity #2b: Break into small groups

Reflect on how you can engage more responsibly and equitably with your audiences going forward. What are some strategies that have not worked well in the past and that you can improve upon going forward?

Channel and Messenger Considerations



Multiple Channels and Messengers

“Official”

- Government agencies
- Elected officials
- First responders
- NGOs
- Extension Educators

Unofficial

- Family members
- Friends
- Neighbors, other community members
- News, media
- Web



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New Way to Kill Bed Bugs

wlwtv 5,160 videos

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Where The News Comes First

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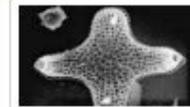
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389,669

wlwtv | November 07, 2008

The pesky pests may have finally met their match!

Suggestions



Get Rid of Bedbugs

by thesmiths9

170,716 views

Promoted Video



Apartment Infested with Bed Bugs

by wlwtv

455,647 views



Bed Bugs Gone Wild!

by wlwtv

165,800 views



Cincinnati Fire Department Bedbug Problem

by wlwtv

30,643 views



Bed Bugs in Four-Star Hotel

by wlwtv

144,737 views



Where do Bed Bugs live and How to Get Rid of Them

by Lordofthefruitflies

242,248 views

Trust is Critical

- ▶ People will seek information from sources they trust.
- ▶ Expertise is important, yet so is caring, openness, timeliness, and respectfulness.
- ▶ People tend to trust sources they think share their values

(Siegrist, Gutscher, & Earle, 2005, p. 147).

Asymmetry Principle:

Trust is easier lost than regained (Slovic, 1993)

- Negative (trust-destroying) events more visible/noticeable than positive (trust-building) events
- Negative (trust-destroying) events carry more weight than positive events
- Sources of bad (trust-destroying) news tend to be viewed as more credible than sources of good news
- Distrust tends to perpetuate distrust

Why Does Trust Matter?



- ▶ When individuals distrust the source, they distrust the information
- ▶ They also often perceive the risks as more severe



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Takeaway #2

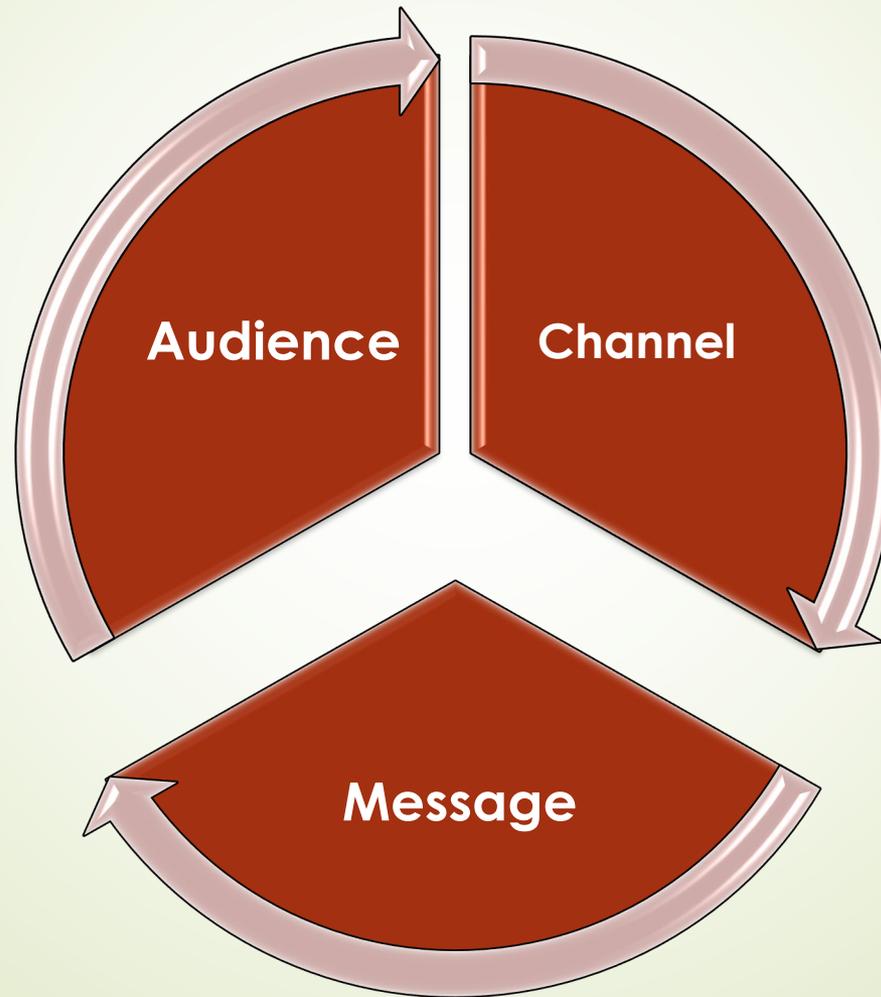
Use authentic messengers and channels that your audience trusts



Activity #3: Break into small groups

Reflect on a situation in your own work where trust in the messenger or channel was lacking and was a barrier to successful communication. How could you have improved that trust and what you would do differently in the future?

Message Considerations



Message Characteristics

- Strategy/Theory
- Message Elements



“There’s nothing so practical as a good theory” (Kurt Lewin, 1943)

What is the goal of the message?

- Build awareness
- Have people seek more information
- Change attitudes and/or behaviors
- Build trust among communicators and audience

Message Elements



- Graphics
- Visuals
- Statistics vs. numbers
- Comparisons
- Labels
- Narratives/stories
- Efficacy information
- Ordering of information
- Frames

e.g., Pink Slime *not* a
good name for
“Lean Finely Textured
Beef”



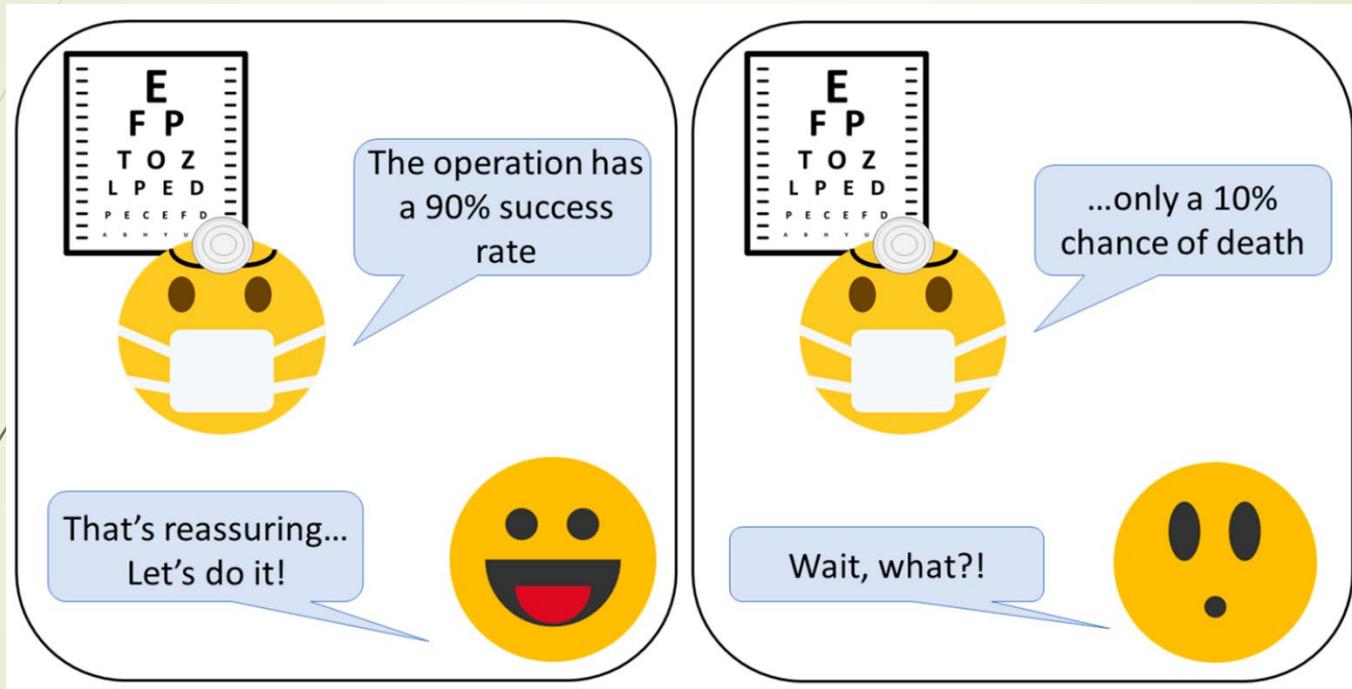
Framing

Framing is a process that subtly alters the presentation of information and results in a **“frame” that “select(s) some aspects of a perceived reality and makes them more salient”**

(Entman, 1993)

“interpretative story lines that **set a specific train of thought in motion**, communicating why an issue might be a problem or pose a threat or what might be responsible for it, and what should be done about it.” (Nisbet, 2015)

Equivalency Frames



(Kahneman & Tversky 1979; Kusmanoff et al, 2020)

Emphasis or Non-Equivalency Frames

**Undocumented
immigrants
Gun safety
Estate tax**



**Illegal Aliens
Gun Control
Death tax**



Use Frames To Reduce Psychological Distance

- Geographic, temporal, or social
(Bar-Anan et al. 2006)
- Can help engage audience (Jones et al. 2016)





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Takeaway #3

Identify frames and values that resonate with target audiences

And....



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Takeaway #4

➔ Use equitable and accurate messages

Activity #4:



What are common frames you use when communicating with your audiences?

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Last, but not least...

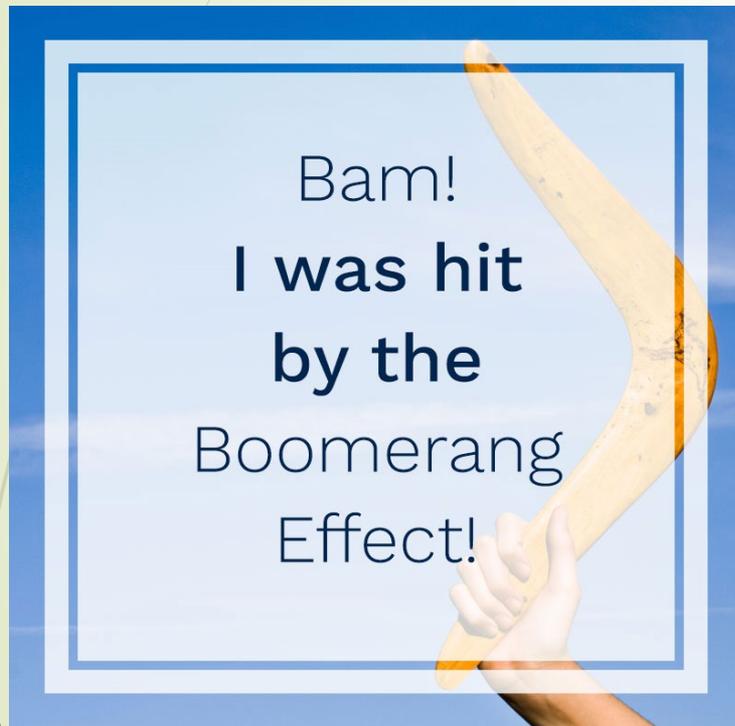
Avoid unintended consequences!



What Messages Are You Sending?

- ▶ In addition to intentional messages, risk communicators should consider unintentional messages they may send
 - ▶ e.g., timing of the meeting, format, procedures

Unintended Consequences



Cause Negative Effects

- Draw attention to risky behavior
- Create worry and confusion
- Minimize real threats

Create Polarization

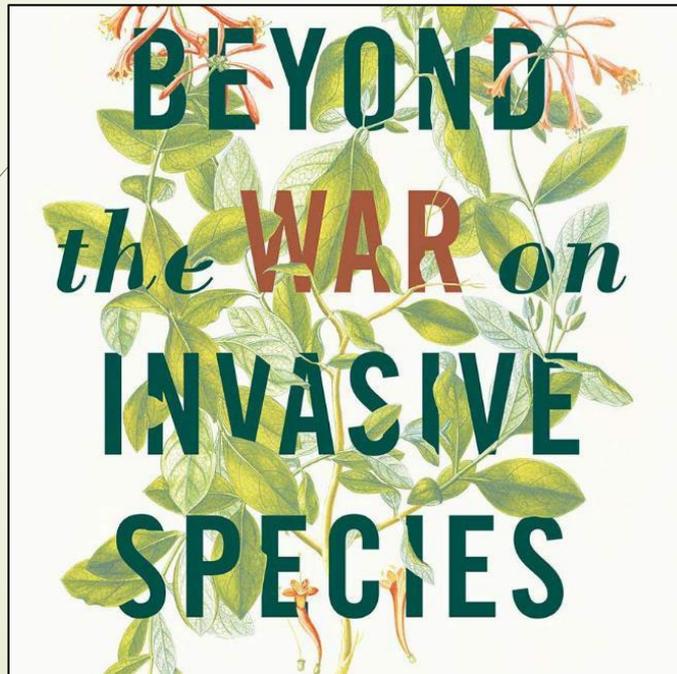
- Can increase divisiveness among stakeholders

Boomerang

- Create opposite effects from what intended, e.g., health communication campaigns

(Bryne & Hart, 2009; Hart, 2014; Hart & Nisbet, 2012)

For Example....Military Metaphors



And...Nativist Metaphors

Table 1. Regulations and laws relating to human immigration and introduced species in the United States.

Introduced species	Immigration
California state quarantine 1881	Chinese Exclusion Act 1882
California fruit pest law 1883	Beginning of Ellis Island restrictions 1901
Lacey Act 1900	National quotas 1921
Plant Quarantine Act 1912	Immigration Act 1924

Evaluate to Avoid Unintended, Unwanted Effects

- *“[P]oor risk communications can create threats larger than those posed by the risks that they describe. We should no more release an unproven communication on people than an unproven drug”*

(Morgan et al., 2002)

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Takeaway #5

- ➔ Test and evaluate messages to avoid unintended effects



Activity #5: Small groups

Have your communication efforts ever resulted in unintended effects? What was the fallout and how did you mitigate the situation?



Key Takeaways

1. Effective risk communication starts with questions, which define the audience, goals, messenger, and message characteristics.
2. Use authentic messengers and channels that your audience trusts.
3. Identify frames and values that resonate with your audiences.
4. Use authentic messengers, craft equitable and accurate messages, and engage responsibly and reflexively.
5. Evaluation is vital to ensure that risk communication does not have unintended negative consequences.



Thank you!