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U.S. Department of Agriculture

Biotechnology Communication Strategies

13 September 2022



Risk is the likelihood of harm, based on hazard and exposure

Hazard: Something that can cause harm

Sharks in the ocean



Exposure: Contact with a hazard

Swimming with sharks





Agricultural biotechnology

Low hazard

low likelihood of harm



High exposure

high likelihood of contact





Factors affecting concern

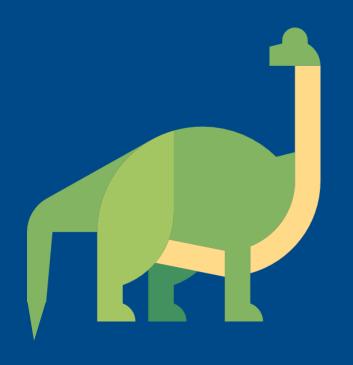
Low concern

- voluntary
- natural
- familiar
- understandable
- trustworthy
- high benefit



- lack of control
- industrial
- unfamiliar
- confusing
- untrustworthy
- benefit unclear

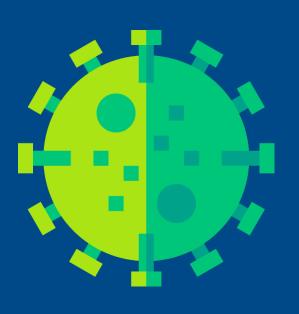




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- Risk communication: providing information about risks

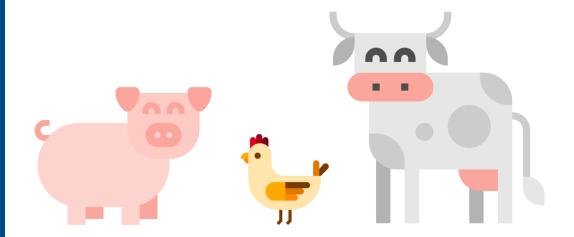


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- Science communication: inspiring interest, enjoyment, or understanding of science
- Risk communication: providing information about risks
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- Concern management: encouraging calm when risk is low, but concern is high

 Science communication: inspiring interest, enjoyment, or understanding of science



 Concern management: encouraging calm when risk is low, but concern is high

Science communication

Concern management

- Make a connection
- Be first, be right, be credible
- Share curiosity
- Show enthusiasm
- Keep it real

- Express empathy
- Show respect
- Promote action

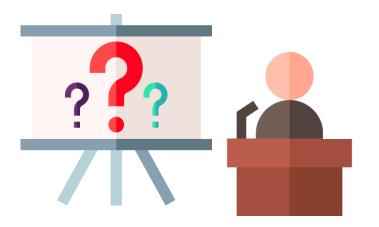


- 1. Who
- 2. What
- 3. Where
- 4. When
- 5. Why
- 6. How



- Who are we speaking to?
- Who do we want to speak to?
- General public or selected audience?
- Who is speaking?
- Who should be speaking to be heard effectively?

- 1. Who
- 2. What
- 3. Where
- 4. When
- 5. Why
- 6. How



- What are we trying to say?
- What are our core messages?
- Does the message resonate?

- 1. Who
- 2. What
- 3. Where
- 4. When
- 5. Why
- 6. How



- Where will we communicate?
- Online or in-person?
- Small or large venue?
- Casual or formal?
- One-way or two-way?

- 1. Who
- 2. What
- 3. Where
- 4. When
- 5. Why
- 6. How



- When will we communicate?
- Proactive or reactive?
- Timed with an event?

- 1. Who
- 2. What
- 3. Where
- 4. When
- 5. Why
- 6. How



- Why are we communicating?
- What are our overall goals?
- How to measure success?

- 1. Who
- 2. What
- 3. Where
- 4. When
- 5. Why
- 6. How



- How will we meet our goals?
- Short or long term?
- Communicate directly with audience or influence the influencer?

Message map



Statements should be:

- accurate
- understandable
- positive
- concise
- quotable



Message map

Key message 1

Supporting message 1.1

Supporting message 1.2

Supporting message 1.3

Key message 2

Supporting message 2.1

Supporting message 2.2

Supporting message 2.3

Key message 3

Supporting message 3.1

Supporting message 3.2

Supporting message 3.3



Transition phrases

- "This is the key point..."
- "What I can tell you is this..."
- "Here's what we believe..."
- "Let's review the facts..."
- "What we do is..."
- "What I know is..."





Message map example

Long history of animal breeding

Selecting animals for hundreds of years

Modern methods allow greater precision

Similar results as breeding

Improves animal welfare

Heat tolerance helps animals adapt

Replace necessary but sometimes painful procedures

Healthier animals are more comfortable

Helps small farmers

More efficient animals need less feed

Disease resistant animals need less antibiotics

More consistent income for families

Resources

- Gene Editing Communication Resource from the Coalition for Responsible Gene Editing in Agriculture
- Gene Editing and Soy Communication Resource from the Center for Food Integrity
- <u>Biotech Information Resources</u> from the International Service for the Acquisition of Agri-biotech Applications (ISAAA)
- Information toolkit on food biotechnologies with a focus on food safety from the United Nations (UN) Food and Agriculture Organization (FAO)

Resources

- <u>Fed by Science</u> from the Supporters of Agricultural Research (SoAR) Foundation
- <u>FoodUnfolded</u> from the European Institute of Innovation and Technology
- <u>Farmer Directory</u> from the Global Farmer Network
- Risk communication resources from U.S. Environmental Protection Agency (EPA)
- Bridging the Knowledge Divide: Experiences in Communicating Crop Biotechnology from ISAAA (dated, but has example message maps)
- Risk Communication Website from Peter Sandman