

Responsible Public Communication

Baruch Fischhoff

Carnegie Mellon University

<http://www.cmu.edu/epp/people/faculty/baruch-fischhoff.html>

National Scientific Advisory Board for Biosecurity

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Intuitions Are Unreliable

People overestimate how well they understand and communicate with one another.

Some Varieties of Unreliable Intuitions

common knowledge effect

false consensus effect

fundamental attribution error

self-serving biases

myths (panic, adolescents' unique sense
of invulnerability ...)

...

Intuitions Are Unreliable

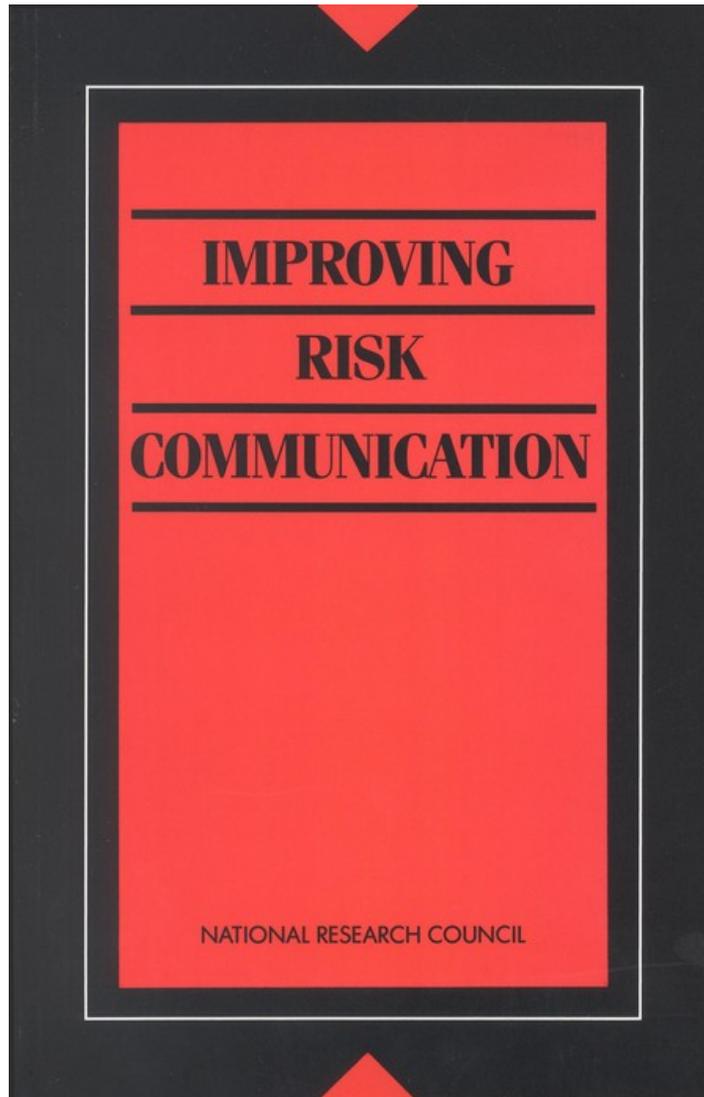
People overestimate how well they understand and communicate with one another.

As a result, we should rely on evidence, rather than intuition, in designing communication processes.

The Basic Science Is Mature

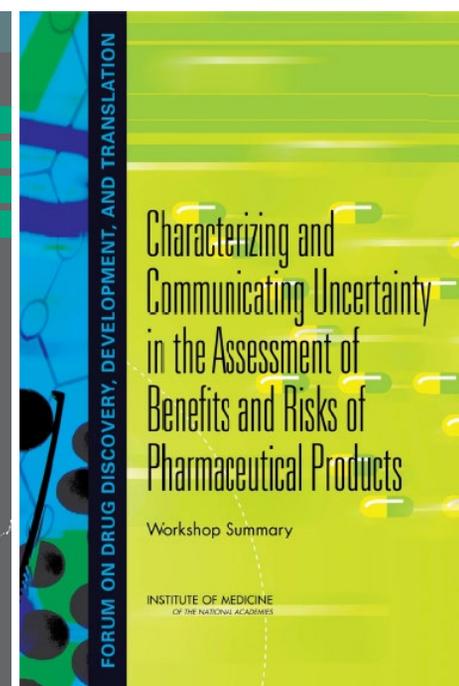
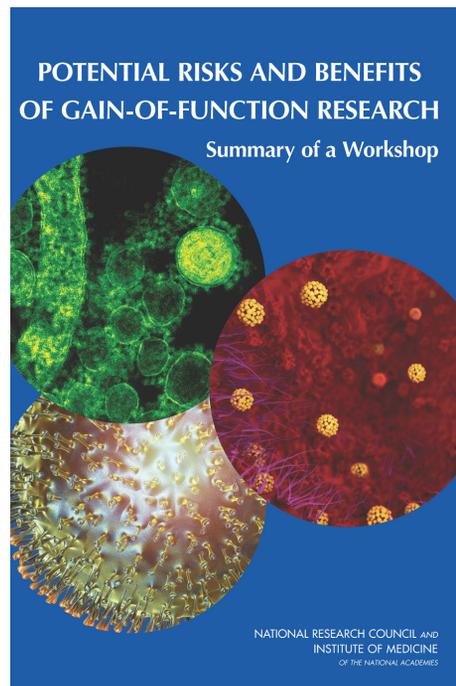
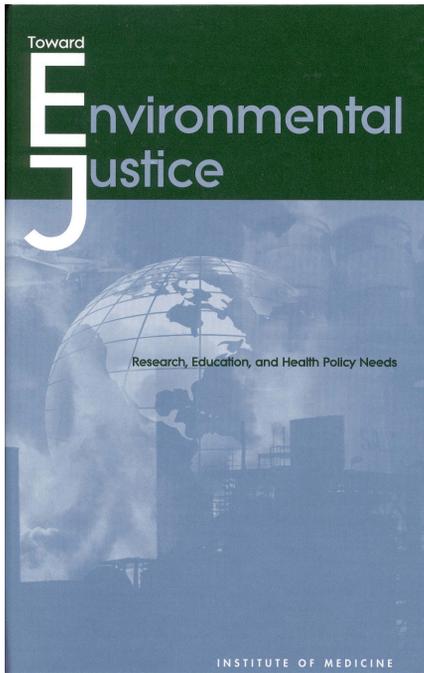
Constituent processes have been studied by the social, behavioral, and decision sciences, for many years.

Risk Communication at NASEM



<http://www.nap.edu/catalog/1189.html> (1989)

Risk Communication at NASEM

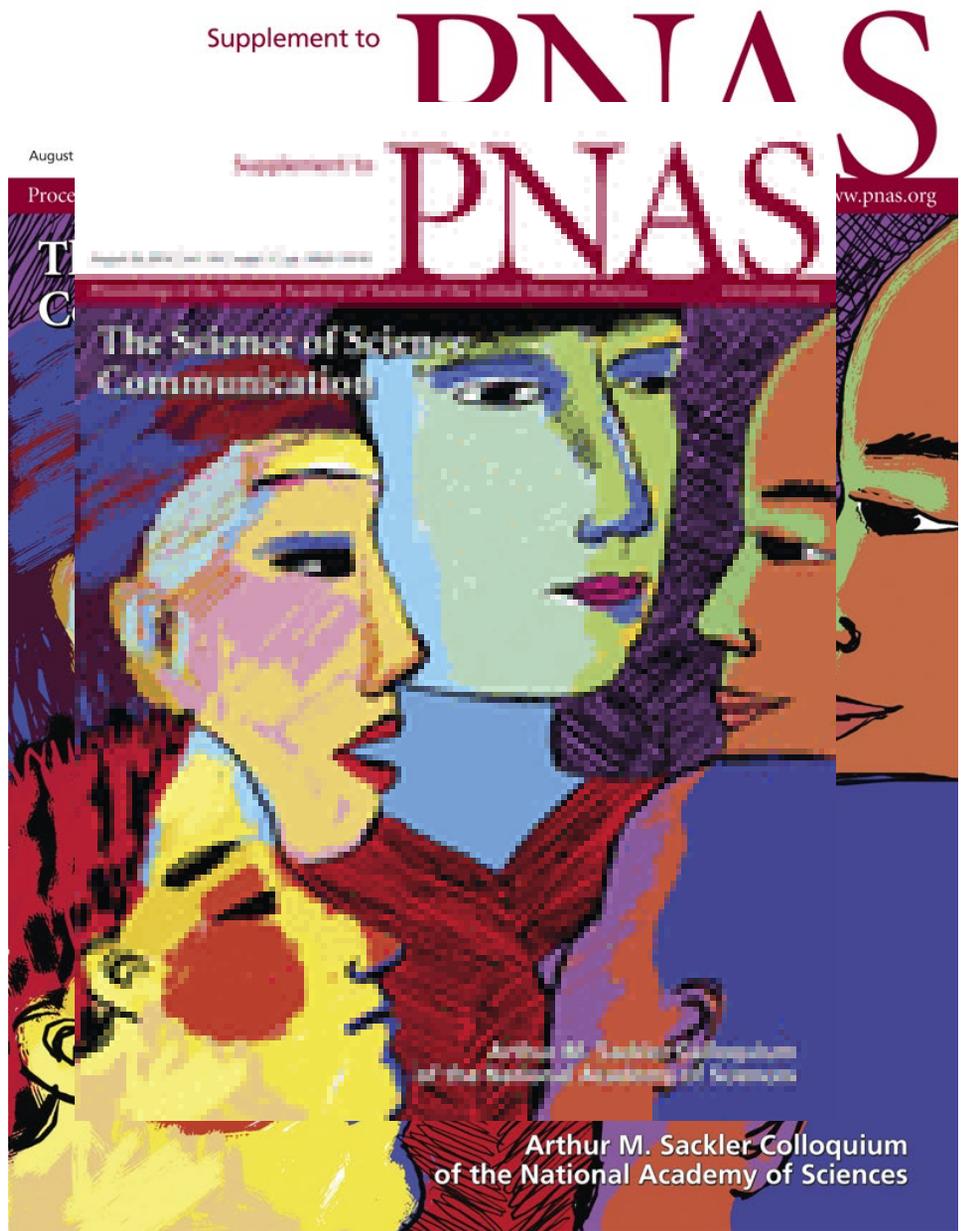


<http://www.nap.edu/catalog/6034/>

<http://www.nap.edu/catalog/21666/>

<https://www.nap.edu/catalog/24738>

<http://www.nap.edu/catalog/18870/>



http://www.pnas.org/content/110/Supplement_3
<https://www.youtube.com/user/SacklerColloquia/videos>

Supplement to

PNAS

September 16, 2014 | vol. 111 | suppl. 4 | pp. 13583–13672

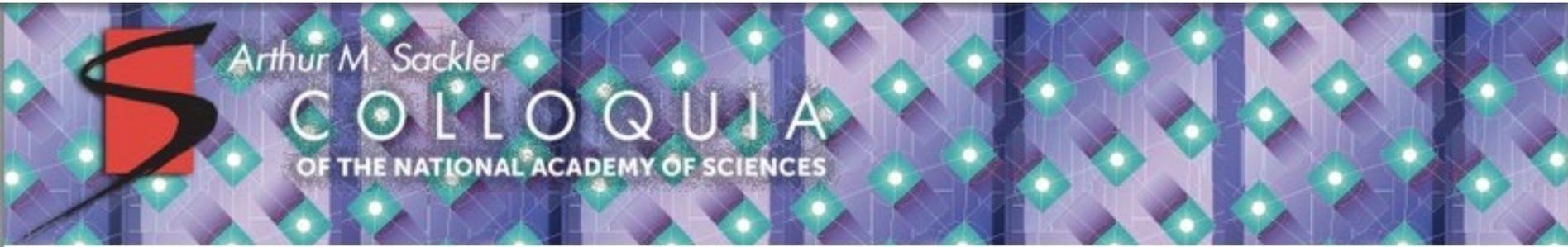
Proceedings of the National Academy of Sciences of the United States of America

www.pnas.org

The Science of Science Communication II



Arthur M. Sackler Colloquium
of the National Academy of Sciences



Arthur M. Sackler

COLLOQUIA
OF THE NATIONAL ACADEMY OF SCIENCES

Information

Summary

Directions

Partnership Awards



The Science of Science Communication III: Inspiring Novel Collaborations and Building Capacity

<http://www.cvent.com/events/the-science-of-science-communication-iii-inspiring-novel-collaborations-and-building-capacity/event-summary-f1b4c0b15f4c44de8aa974181ebe212f.aspx>



Governance of Dual Use Research in the Life Sciences:
Advancing Global Consensus on Research Oversight
Zagreb, Croatia, June 10-13, 2018



**COMMUNICATING
RISKS AND BENEFITS:**
An Evidence-Based User's Guide

*Baruch Fischhoff PhD,
Noel T. Brewer PhD, & Julie S. Downs PhD, editors*



<http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/ucm268078.htm>

Each Chapter

Summarizes the science

Offers best guesses at practical implications

Shows how to evaluate communications

(<3000 words)

The Basic Science Is Mature

Constituent processes have been studied by the social, behavioral, and decision sciences, for many years.

As a result, communication teams should include people with requisite expertise.

Content Design is Straightforward

The design process applies basic science in an orderly way, extracting its relevant results and methods.

Content Design Process

Analysis

What specific decisions do people face?

Description

How do they make them intuitively?

Intervention

How can they be helped in making them?

Evaluation

Are our current efforts good enough?

Repeat, as necessary.

Some Applications

radon

pre-term birth

pharmaceuticals

climate change

phishing

breast cancer

nuclear incidents

tornadoes

xenotransplantation

smart meters

HIV/AIDS

...

sexual assault

intelligence analysis

EMF

avian flu

palliative care

breast implants

nuclear energy in space

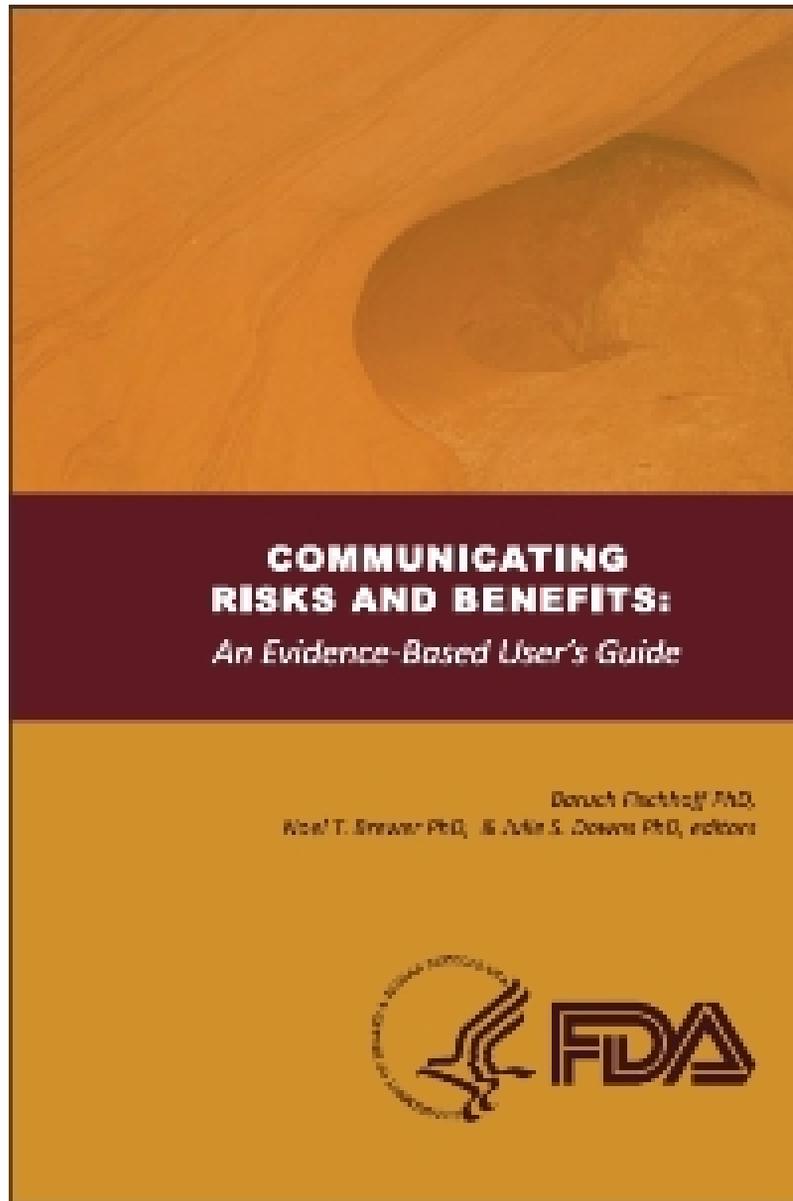
Plan B (morning after pill)

small modular reactors

vaccines (anthrax, MMR)

critical care medicine

...



<http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/ucm268078.htm>

Each Chapter

Summarizes the science

Offers best guesses at practical implications

Shows how to evaluate communications

for no money at all

for a little money

for money commensurate with the personal,
organizational, and political stakes riding on
effective communication

Requisite Expertise

Subject matter specialists for accuracy

Decision scientists for relevance

Social and behavioral scientists for mutual
understanding

Practitioners for execution and local knowledge

Requisite Expertise

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Practitioners for execution and local knowledge

All opinions are welcome, but authority is
vested in those who know each topic best.

Content Design is Straightforward

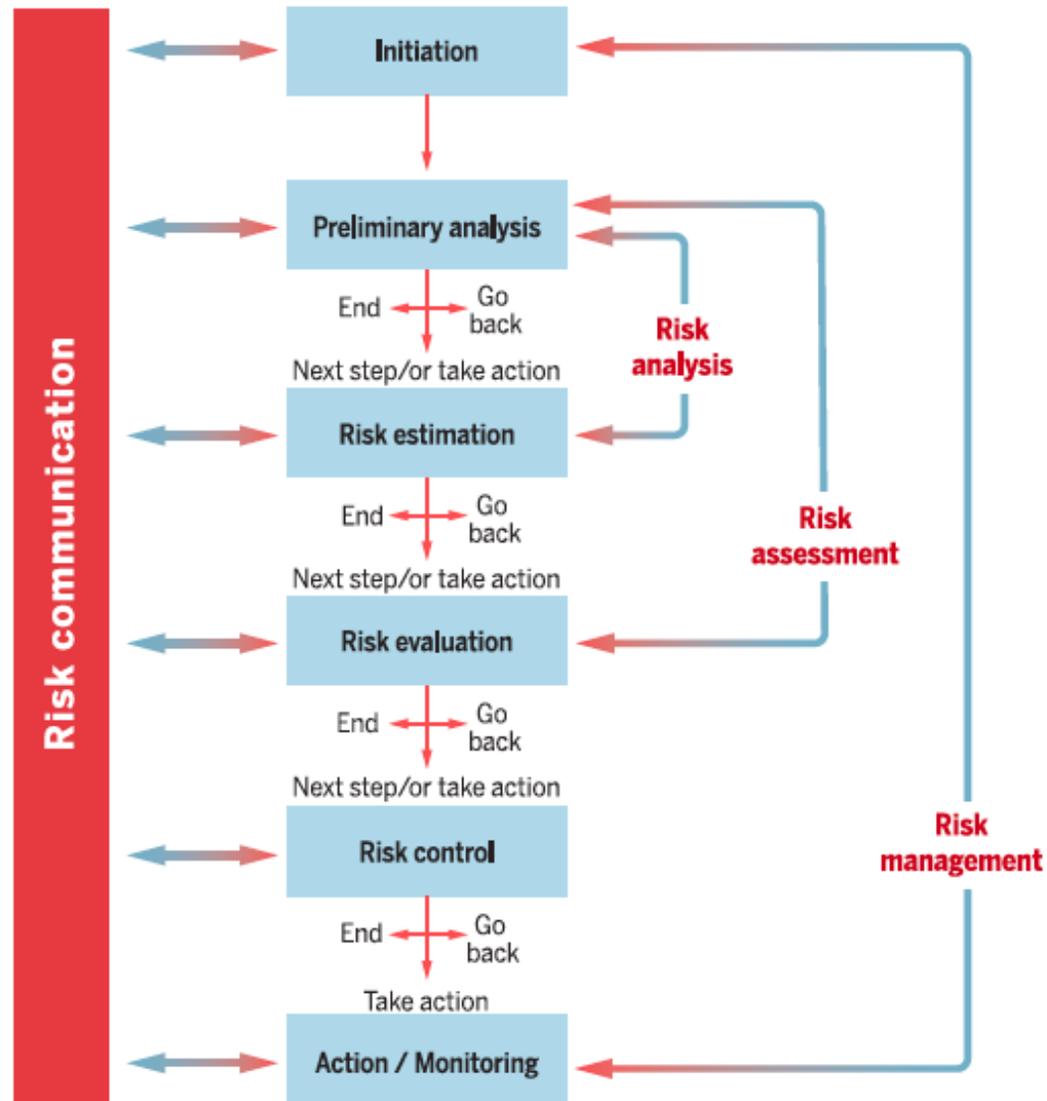
The design process mobilizes basic science in an orderly way, extracting its relevant results and methods.

As a result, communication teams need requisite expertise and coordination.

Process Communicates

When and how an organization communicates (or stays silent) shapes how its messages are interpreted and how well it is trusted.

A Communication Process Standard



Fischhoff, B. (2015). The realities of risk-cost-benefit analysis. *Science*, 350(6260), 527.
<http://dx.doi.org/10.1126/science.aaa6516>

FDA Risk Communication Advisory Committee (RCAC)

Charter of the Risk Communication Advisory Committee to the Food and Drug Administration

Authority:

The Advisory Committee on Risk Communication, referred to herein as the Risk Communication Advisory Committee, was established by 21 U.S.C. 360bbb-6, as added by section 917 of the Food and Drug Administration Amendments Act of 2007. The Committee is also governed by 21 CFR Part 14 and Pub. L. 92-463 (5 U.S.C. App.), the Federal Advisory Committee Act, which sets forth standards for the formation and use of advisory committees.

**FDA'S
STRATEGIC PLAN
FOR
RISK COMMUNICATION**

Fall, 2009

<https://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/ucm183673.htm>
<https://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/RiskCommunicationAdvisoryCommittee/UCM526451.pdf>

Recommendations for Managing Emerging Events

Have a consistent policy in all domains

Provide useful, timely information

Address: risks and benefits, uncertainty,
personal actions, FDA actions

Audience needs should drive agency
analyses

Use standard formats; evaluate routinely

Consider needs of diverse populations

The Voice of the Patient

A series of reports from the U.S. Food and Drug Administration's (FDA's)
Patient-Focused Drug Development Initiative

Chronic Fatigue Syndrome and Myalgic Encephalomyelitis

Public Meeting: April 25, 2013

Report Date: September 2013

The Voice of the Patient

A series of reports from the U.S. Food and Drug Administration's (FDA's)
Patient-Focused Drug Development Initiative

Sickle Cell Disease

Public Meeting: February 7, 2014

Report Date: October 2014

Process Communicates

When and how an organization communicates (or stays silent) shapes how its messages are interpreted and how well it is trusted.

As a result, communication should be treated as a strategic function.

Bad News

Everyone is an intuitive communicator, leading to improvised content and processes.
Without a strategic commitment, events overtake evidence-based communication.
Organizations often lack absorptive capacity for social, behavioral, and decision science expertise.

Good News

Broad and deep basic science.

Principles for addressing many recurrent issues.

Applications to many specific risks.

Costs are low; economies of scope are possible.

Primary barrier is institutional inertia.