

A Quick Introduction to Risk Perception

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What is risk? To oversimplify one definition: Risk = Magnitude x Probability, right?

But that is not how most people perceive risk, most of the time.

To the public -- Risk = Hazard + Outrage* (Outrage, and fear, dread, misery)

Public risk perception is strongly influenced by "outrage factors" (see box). This isn't really irrational. It is usually based on shared cultural values, so the outrage factors may vary across cultures. But there are almost always outrage factors at work when the public is responding to a hazard.

The public tends to see risk as a combination of Hazard + Outrage, focusing mostly on the outrage. But technical people tend to address mostly the hazards -- until they get into political trouble, and then they have to address the outrage (or fear).

For a quick two-page description of this, see "Risk Communication: Facing Public Outrage," from the U.S. EPA Journal, 1987, at: <http://www.psandman.com/articles/facing.htm>

12 "outrage factors" described by Peter Sandman derived from the psychometric risk model of Paul Slovic

"Safe"	"Risky"
Voluntary	Coerced
Natural	Industrial
Familiar	Exotic
Not memorable	Memorable
Not dreaded	Dreaded
Chronic	Catastrophic
Knowable	Unknowable
Individually controlled	Controlled by others
Fair	Unfair
Morally irrelevant	Morally relevant
Trustworthy sources	Untrustworthy sources
Responsive process	Unresponsive process

*Technical people take note: for you, $R = f(H,0)$