

# Toxic Hazards and Risk Communication

Tee L. Guidotti

The George Washington University

&

University of Alberta

# Toxic Hazards

- Fear of unknown
- Lack of reliable or consistent information
  - scientific uncertainty
  - physicians not confident
  - misinformation from media, rumor
- Fear of persistent effects
- Distrust of authority

# Natural v. Technological Disasters

## Natural Disasters

- “Act of God” without human agent
- Liability limited
- Less blaming
  - except for lack of preparedness
- Rapid recovery
- Community empathy, cooperation

## Technological Disasters

- “Act of man”: human agent responsible
- Legal, moral liability
- Blaming
- Prolonged process
  - litigation
- Community approbation

# Why is the Community Fearful After a Technological Disaster?

- Reputation of community, housing prices
- Loss of industry, employment
- Loss of income, business decline
- Suspicion that claims are exaggerated
- Suspicion that situation is being exploited by claimants
- Fatigue over hearing the story repeated
- Fatigue and emotional response

# Hierarchy of Community Concerns

- Cancer
- Asthma, allergies, respiratory disorders
- Congenital defects, reproductive hazards
- Immunological deficiency
  - notion of “chemical AIDS”

Children’s health a special concern!

# “Moral” Issues in Risk Management - 1

- Outrage factor
- Voluntary v. involuntary assumption of risk
- Natural v. industrial (technological)
- Equity (fairness)
  - distribution of risk (“environmental justice”)
  - distribution of benefits
- Familiarity and tolerance

*Digression: Lack of familiarity is really a rational criterion!*

- *Society accommodates risk and anticipates costs based on past experience.*
- *So do insurance companies!*
- *Unfamiliar risks upset the expectations..*
- *Special effort to anticipate an uncertain risk.*
- *Uncertain risks cannot be efficiently hedged.*

# “Moral” Issues in Risk Management -2

- Dread outcome
  - e.g. cancer
- Knowable v. unknowable
  - people also make up their own explanations!
- Moral relevance
  - “acceptable” risk
  - who is profiting
  - negligence and indifference
  - right and wrong

# *Digression: “Right and Wrong” or Morality in Risk*

- *Risk situations are little morality plays!*
- *There are only two newspaper stories:*
  - *Right = “oh, the wonder of it!”*
  - *Wrong = “oh, the shame of it!”*
- *Taking risks is considered a good, brave behaviour (in our culture).*
- *Imposing risks is considered bad, cowardly behaviour (in our culture).*

# “Moral” Issues in Risk Management - 3

- Control by people v. control by system
  - helplessness and locus of control
  - faceless system
  - responsiveness to concerns
- Trust
- Transparency of process
- Accountability

# *Digression: Governance and control issues*

- *We are all controlled by culture, family, etc.*
- *People expect a relationship with authority.*
- *Transparency and accountability key, not actual participation.*
- *Trust is as much about predictability and empathy as integrity.*
- *Defensive behavior is a signal for distrust, whether or not there is something to hide.*

# U.S. EPA's Seven Cardinal Rules of Risk Communication

# Caveats!

- We do not necessarily agree with all of these as written.
- These are skills, not strategies.
- They will make you a better communicator but you have to know what it is you are communicating.
- Know your audience, preferably before you walk in the door!

# 1. Accept and involve the public as a legitimate partner

- In a democracy, people expect the opportunity to participate in decisions that affect their lives.
- Demonstrate respect for the public.
- Public will hold you accountable, whether you are a public servant or not.
- The tricky bit is how to “involve” them.

# *Tips*

- *Once you step on the platform, you share responsibility for the problem!*
- *Do not attempt to diffuse concern or preempt action.*
- *Help and inform - never try to manipulate.*
- *People want the opportunity to participate but will not necessarily actually do so.*
- *Those who do often have an agenda.*
- *Agendas are sometimes good.*

## 2. Plan carefully and evaluate your efforts.

- Begin with clear, explicit objectives.
- Evaluate information ahead of time, be aware of weaknesses in data, knowledge.
- Address concerns of subgroups in audience but don't pander.
- Recognize different "publics" and adapt strategies to each.
- Pretest message when possible.

# *Tips*

- *Prepare two or three key talking points, word them simply and learn them cold.*
- *Pretest your message with typical people, not activists or community leaders.  
(Definitely before going on TV.)*
- *Beware of small, seemingly “unimportant” community meetings.*
- *“We need to do further studies” sounds evasive to the public.*

## *Some “publics”*

- *Activists*
- *New families, concerned mothers and fathers*
- *Ethnic, class and racial minorities (be aware of environmental justice issues)*
- *Workers (among other community residents), union leaders*
- *Business leaders*
- *Retirees*

### 3. Listen to the audience's specific concerns

- Listen to the audience and identify their concerns.
- Do not assume what people know, think or want to be done.
- Recognize and honour people's emotions.
- Recognize concerns for fairness, trust, credibility, competence, control, caring, morality.

# *Tips - 1*

- *Never parachute cold into a meeting with no preparation.*
- *Arrive early, mingle, get an idea of who is there and what people are thinking.*
- *Experts, esp. physicians and academics, do not live ordinary lives! Stay in touch!*
- *Honouring emotions is about respect, not validation.*

## *Tips - 2*

- *Recognize situation as a moral fable!*
- *People will look for meaning in what you say, how you say it and how you are dressed.*
- *People will read in all kinds of concerns, myths and meaning that you never intended.*
- *People come to the table with prior life experience, beliefs, personal knowledge etc.*

## 4. Be open, honest and frank.

- Trust and credibility are your most important assets.
- Once lost, trust is impossible to regain.
- Physicians have higher credibility, govt agencies and lawyers lower, in general.
- Admit uncertainty or mistakes.
- Do not speculate or distort level of risk.

# *Tips*

- *Physicians may have higher credibility but don't count on it in a pinch:*
  - *the MD alone does not make anyone an expert on environmental issues*
  - *many physicians are instinctively conservative*
  - *many physicians have trouble thinking in populations, more comfortable with individuals*
- *Discussing worst-case scenarios may be a good strategy if topic arises naturally.*

## 5. Coordinate and collaborate with other credible sources.

- Develop relationships with other sources of risk information, preferably in advance.
- Coordinate messages so that public hears a consistent interpretation.
- Avoid public disagreements but acknowledge uncertainty.
- Never be blind-sided with new information.
- Monitor public media on issue as well as technical sources.

# *Tips*

- *If others do not coordinate their message with yours, don't argue.*
- *Be respectful to the other party but state your position clearly and your reasons.*
- *Let them take the flack for the inconsistency, not you.*
- *If you are not prepared, don't go unless you absolutely have to.*

## 6. Meet the needs of the media

- Acknowledge that media have a legitimate role and need for information.
- Understand behaviour of media reps: need simplicity, conflict, “hook” for stories
- Prepare media materials in advance.
- Be accessible to media.
- Establish relationships with media reps.

# *Tips*

- *Media are (usually) not out to get you! They are out to get a story. Don't be the story.*
- *Media materials should be sufficient for a reporter to write the whole story.*
- *Supply a “hook” that media can use.*
- *If a reporter uses you as a reliable source when they need one, more likely to come to you when you need to get your word out.*

## 7. Speak clearly and with compassion

- Avoid technical language and jargon.
- Be sensitive to local norms and expectations.
- Use concrete examples, vivid metaphors.
- Be sure that examples are relevant and simple.
- Respond to emotion; acknowledge tragedy and anxiety.

# *Tips - 1*

- *This is not the time to challenge core community attitudes and beliefs.*
- *People respond to stories, not theory or facts.*
- *Use universal examples, not borrowed experience.*
- *Watch your body language (90% of communication), keep consistent with message.*

## *Tips - 2*

- *Responding to emotional manipulation or a histrionic outburst:*
  - *try to convey empathy for the person's distress*
  - *at the same time express skepticism over what is being said*
  - *never restate the problem in objective terms, without emotion*
  - *never cut someone off, but gently speak with them*
  - *regain control by restating concerns expressed*

# Cardinal Sins of Risk Communication - 1

- Detachment and remaining aloof.
- Withholding information.
- Ignoring people's feelings.
- Failure to follow-up.
- Denying a mistake.
- Faking an answer.
- Explanations in jargon.

# Cardinal Sins of Risk Communication - 2

- Bureaucratic presentation.
  - Public is rarely interested in process
- Not coordinating message with other parties.
- Wrong spokesperson at a public meeting.
- Mixed messages. (Watch body language.)

Adapted from Chess C. Center for Environmental Management, Tufts Univ., 1990.

# Acknowledgement

This presentation was supported in part by the  
US Environmental Protection Agency.

EPA award T-82861301-0

“Training Residents in Environmental Health  
and Risk Assessment”, 2000.

# Lessons from Community

## Studies in Alberta - 1

- Power relationships are critical to understanding perceptions of risk.
- Risk perception is powerfully influenced by past conflict, memory and “hidden agendas”.
- Collective anxiety tends to follow a hierarchy of concerns, shifts as each concern is addressed.
- Culture conditions all of this.

# Lessons from Community Studies in Alberta - 2

- Distrust of public officials is almost universal; strategies to build trust in an agency usually fail.
- Once convinced there is a problem, the public will not let go.
- People may engage in actions counter to their interests if they are emotionally engaged in an issue.

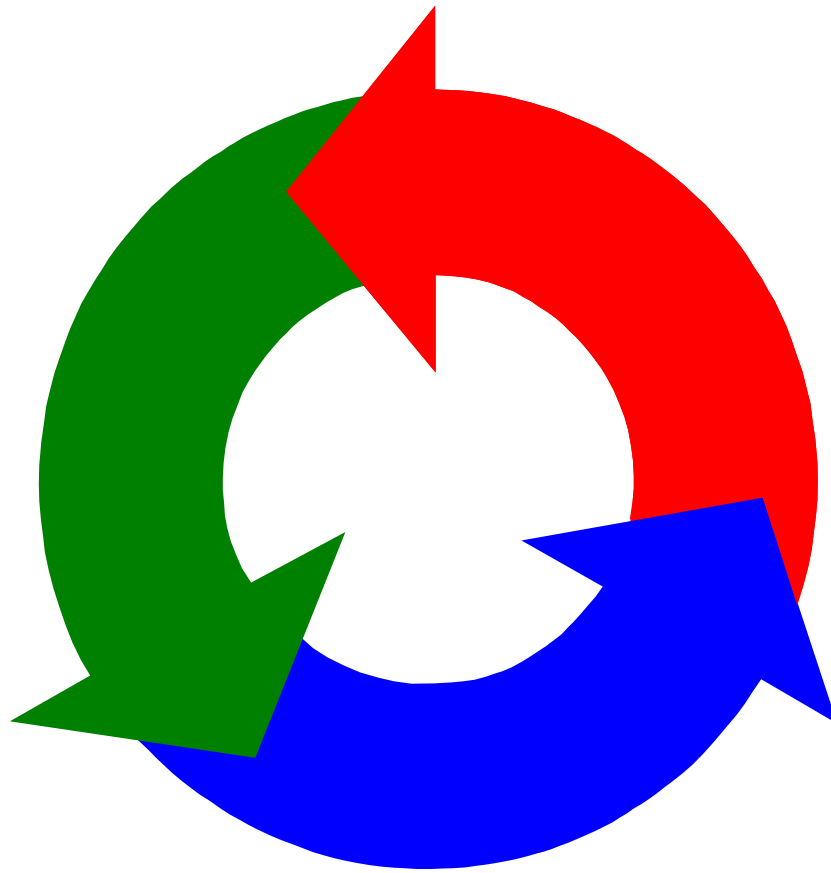
# Alternative Approaches to Risk Communication - 1

- Risk comparison
  - public process
  - expert participation
  - prioritization
- Risk anticipation
  - proactive
  - “environmental scan”

# Alternative Approaches to Risk Communication - 2

- Culturally-specific risk communication
- Health advisories
  - target audience
  - appropriateness
  - quantitative risk assessment: assumptions

# The Dysfunctional Triangle



# The Dysfunctional Triangle

- Public health authorities
- Environmental advocates
- Aboriginal community