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FINAL REPORT

RISK COMMUNICATION

AND THE PUBLIC INTEREST

A "by invitation only" Seminar/Workshop
on what the public needs to know
to make informed decisions on chemical risks,
and how that information should be communicated.

October 16-17, 1987
The Woodlands, Texas

Co-Sponsored by
The Texas Risk Communication Project
and
The Woodlands Center for Growth Studies/
Houston Area Research Center

EXECUTIVE SUMMARY

Risk Communication and the Public Interest Seminar/Workshop October 16-17, 1987

Background

As a nation, we have had public policies to give people information about risks at least since the 1906 Pure Food and Drug Act. More recently, prompted by events at Love Canal, Times Beach, and Bhopal, attention has focused on environmental risks, especially risks from chemicals.

The Texas Risk Communication Project was formed in 1986 by a group of widely diverse organizations to increase public understanding of the health risks—acute and long-term—from the manufacture, use, movement, transportation, or dispersal of chemicals.*

The Texas Risk Communication Project (TRCP) decided as its first step to convene a Seminar/Workshop that would bring together members of a representative cross-section of affected groups. This report presents the findings of the Seminar/Workshop which was held at The Woodlands, Texas on October 16-17, 1987. TRCP continues to meet, using the eleven themes developed at the workshop as a basis for a "risk communication process" which we will test in the field the near future.

Procedure

The Seminar/Workshop, co-sponsored by the Houston Area Research Center/Woodlands Center for Growth Studies, was held October 16-17, 1987. More than 140 people representing industry, community groups, environmentalists, regulatory agencies, emergency response professionals, academia, health professionals, and the news media participated. Attendance was by invitation only in order to maintain balance among groups.

The first morning consisted of an opening address by William Lowrance of Rockefeller University about the nature of risk and risk communication. He was followed by a panel discussion with representatives of the media: Carlos Byars, Houston Chronicle, the law: Sanford Gaines, University of Houston Law Center, industrial facilities: Richard Knowles, Du Pont, citizens' groups: John O'Connor, National Campaign Against Toxic Hazards, and government: Frances Phillips, U.S. EPA. Susan G. Hadden, LBJ School of Public Affairs, University of Texas, spoke at lunch summarizing the morning sessions and setting the stage for the remaining workshops and study groups.

In the afternoon, each participant attended two of five different small study groups where different scenarios eliciting risk communication were discussed. The five scenarios were: superfund site, chemical release from plant, expanded use of possible carcinogen in plant, unusual citizen illness levels, and proposed incinerator and transportation of waste. Groups were composed of representatives of different interests, and each was served by a facilitator, reporter, and resource person.

The following morning, each participant worked in a small group to discuss a set of themes or needs for risk communication that emerged from all scenario sessions the previous day, and the small groups reported their discussions back to a general meeting of all participants.

Report

This report is available in two parts. The first part consists of this Executive Summary and results of the Seminar/Workshop. A more detailed report includes this summary along with additional materials: background information on TRCP, an overview of the five scenarios and highlights of the small group discussions; selected materials provided by the morning speakers, a complete workshop program, and a list of participants. Additional copies of both reports are available by writing to The Texas Risk Communication Project, P.O. Box 672, Deer Park, Texas 77536. The reports may be copied or reproduced in full or in part for non-commercial purposes.

* To distinguish them from pharmaceuticals, chemicals were defined by project members as the products of the traditional chemical industry.

Findings

Although the scenarios differed considerably, each elicited from participants similar concerns about risk communication. These were gathered into eleven "common themes" by the workshop facilitators. They are:

1. Credibility and competence of person giving the information are important—whom do you trust?
2. Credibility is established over a long period of time prior to a specific need to communicate.
3. The specific need for communication must be considered in a broader context.
4. The communication process should be varied to fit specific audiences.
5. The desire for certainty conflicts with the reality of uncertainty in data evaluation.
6. All interest groups need to conduct ongoing public education.
7. Communication is a two-way process.
8. Attitudes count.
9. The unique position and needs of the media must be considered.
10. Economics is an issue.
11. The one who needs to communicate should deal directly with the audience.

Results

The workshop was intended to be a first step towards developing a general model for risk communication. The themes that emerged from the workshop constitute a first step, since they suggest problems and provide guidelines that must be incorporated into a more general risk communication process. Now, the Texas Risk Communication Project will try to develop the process in more detail. It is believed, however, that the "themes" can stand alone and contribute to present risk communication efforts.

The following is a compilation of ideas, thinking, opinions, suggestions and recommendations stemming from the participants during the Seminar/Workshop.

1. Characteristics of risk communication.

The themes listed above highlight some characteristics of risk communication that must be considered explicitly by all parties. Among these characteristics are:

- A. Process and Substance: Risk communication cannot be effected with words alone; rather, it requires ongoing relationships among the parties. Thus guidelines for risk communication include suggestions not only about the actual content of the communication—its substance—but also about the way in which communication occurs. For example, one guideline about substance that participants seemed to accept is "present technical information in more than one format". A process guideline is "build credibility through a long series of interactions rather than waiting for a particular incident to occur". Participants agreed that process is perhaps even more important than content, since even the best-designed messages will not always elicit full understanding of risk. In some ways, the process is the risk communication, since non-experts will always be dependent upon experts to interpret technical information. If participants have a long-standing relationship, they will be more able to accept these interpretations.
- B. "Acute" and "Long-Term" Risk Communication: Analogous to the common distinctions between acute and long-term risks is the distinction between kinds of risk communication. "Acute" risk communication must occur in response to a particular event such as an accident or a proposed facility siting. Long-term risk communication occurs regularly over a period of time and is motivated by a desire of participants to understand and work together rather than by the need to achieve particular results. Several of the scenarios considered in the workshop covered acute incidents, including a spill and a facility siting. In each case, participants believed that they would have been able to assess risk better if they had been talking with industry all along.

C. Nature of the Risk: Several characteristics of risks themselves affect the task of risk communication. Participants implicitly or explicitly identified the following:

1. **Voluntary or Involuntary.** Risks assumed voluntarily are generally regarded as less "risky" than those foisted on people without their agreement or knowledge. Smoking, using hair coloring, and driving are all mostly voluntary activities. A related dimension of risk is controllability. Although driving may not be entirely a voluntary activity, it is at least partly controllable by the individual who can choose route and speed and drive defensively.
2. **Individual or Community.** We have had long experience with communicating risks to individuals who can then decide whether to accept them. Labels let people decide whether to assume a risk by buying the product; if purchased, they allow him to decide whether to use the product safely. Chemicals in the environment pose a different kind of risk, because the risks cannot be controlled by individual action. Instead, the community must act together to limit or accept the risk.

In many cases, information about risks also concerns the population at large rather than any one individual. Such statistical risk information is often difficult to understand, because experts cannot use it to answer the question, "Is it safe for me?" This puts further emphasis on the need for collective rather than individual responses to risks.

- D. Certainty and Uncertainty:** Formally, risk is composed of a hazard and the probability that it will occur. Probabilities mean uncertainty, but human beings seek certainty. When experts say, "I don't know," they open the door for exploitation of people's fears. It is equally bad to pretend certainty where there is none, because eventually something will happen to disprove the assertion. People can accept uncertainty more easily if 1) they trust the source of the information and 2) they are given some action they can take to help control, limit, or understand the risk.

- E. Risk Communication vs. Risk Reassurance:** There is a temptation to hope that communicating risks will reassure people so that they will accept the risks. This attitude is embodied in the notion that people will see how foolish it is to worry about a small risk when they willingly accept much larger risks such as those associated with driving an automobile. Such risk comparisons often don't work—sometimes because the comparisons offered are voluntary and the risk under discussion is involuntary. On the other hand, we don't want risk communication just to increase the general level of worry, especially if there is no reasonable way to decrease the risk through personal action. The people in possession of the information must try to present it in a way that balances these concerns.

II. Themes and Recommendations.

The eleven themes and risk characteristics listed previously were not intended to serve as the final outcome of the seminar/workshop; instead, they were intended to focus the Saturday morning discussions. Recognizing that the eleven themes sometimes overlap and sometimes do not make points explicitly, they have been rearranged and reworded as follow:

A. Establishing a Context for Risk Communication

1. Risk communication is not a one-way process. All parties must participate, and be granted opportunity to speak. Each must listen and respect the others' positions.
2. Risk communication depends upon trust among the parties. This is only established over a long period of time.
3. The credibility of the person giving information is established through a long relationship prior to a specific need to communicate.
4. All parties should contribute to ongoing public education efforts about risks likely to be present in that community.

Specific suggestions to industry:

- If new in the community, identify leaders and talk to them first. Every community is different, so you need local people to help you. Very soon move out beyond the leaders, perhaps using the media (see below).

- If already in the community: Get involved in local civic organizations. Develop programs with the schools. Adopt a school. Provide tours and information for teacher groups. Establish information resources for the public. Consider a chemical information center in your local library. Offer public meetings, plant tours, and open houses.

B. Communicating on Specific Occasions

1. The one who needs to communicate should deal directly with the audience.
2. Spokesmen need communication skills and training, and must have authority. Use a team or even third-party experts as backup to the authoritative speaker.
3. Vary the communication process to fit audience and situation. Public hearings and news conferences with their "us-versus-them" arrangement may not be as effective as roundtables, one-to-one, small groups, and even telephone hot-lines.
4. Listen to the questions asked. Taking notes shows concern. Respond to all questions, even if you have to say, "I don't know."
5. Communication itself is costly, both to generate and to receive. Do not hesitate to discuss what it will take to obtain information that is requested—ask, "Is it worth it?"
6. Always be as personal as possible. Answer all questions. Be honest. Respect both the intelligence and the emotions of audience.
7. For facility siting: Start talking first to the people nearest to the facility. Follow through on these early communications once the permit is obtained and the facility is in place.
8. For controversies: Lay out which are non-negotiable issues and which issues are open to compromise. Devise a means for involving people in some of the decisions.

C. Working with the News Media

1. The news media are in a unique position to tell people about risks. They are also in a position to mobilize people for or against.
2. Risk communicators need to understand the media—how they operate and what kinds of information they can use.

Long-term: Pre-plan for the media. Know your local reporters, and establish key contacts. Know your local media, both written and electronic. Identify their size, their audience, and their particular needs. Provide information routinely - not just when you have to. This helps to build bridges and establish trust. Provide background and historical perspective. Involve the media in emergency response drills.

Short-term: Identify one spokesperson. Ensure that person has authority as well as expertise. Refer all questions to that one person. Keep that person informed of changes in the situation.

D. Communicating Technical Information

1. People have different backgrounds and can understand different levels of information. Provide several levels, starting with the simplest.
2. People process information in different ways. Provide the same data in at least two forms - quantitative and qualitative, written and pictorial.
3. People prefer certainty and will ask questions hoping to obtain it. That creates a problem because risks are uncertain. Part of technical risk communication is to explain uncertainty.
4. If you have to say, "I don't know," tell why and what you plan to do about it. (Also see B4 on costs.)
5. Risk comparisons are most helpful when the risks are really comparable.
6. People need to know what the expert opinion is based on. When the expert says, this will have "no effect," explain what assumptions and calculations were made to reach this assessment.
7. Anecdotes about similar facilities/risks elsewhere are meaningful.
8. There is a tension between the ability of new technologies to resolve problems of the old and the fact that they are untried.