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Risk communication – principles with special focus to damp building problems

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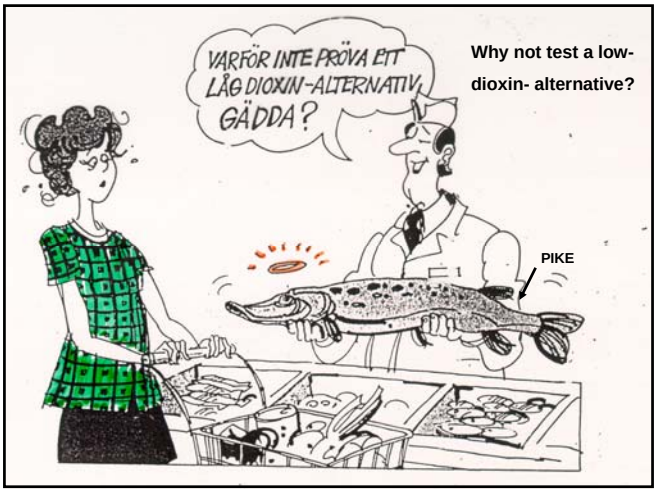

Why not test a low-dioxin- alternative?

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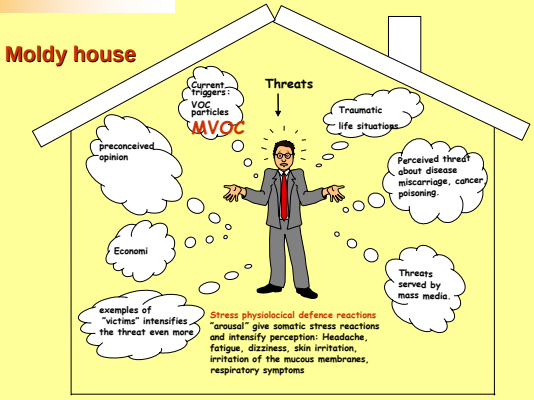

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What is a <u>risk</u>? <u>Risk communication</u>?

”a risk is the <u>probability</u> that the <u>exposure</u> from a <u>risk source</u> will give negative <u>consequencies</u>”

<u>risk communication</u> is separated from <u>risk information</u>

Peter Sandman:
”Improving <u>dialogue</u> with communities”

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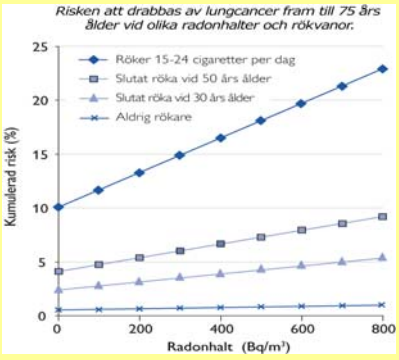

Estimate

400 lung cancer/year

20-40 non-smoker (?)

Population risk vs. Individuell risk

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RADON IS OUR BIGGEST ENVIRONMENTAL HEALTH PROBLEM

Tear down the houses

(an environmentalist)

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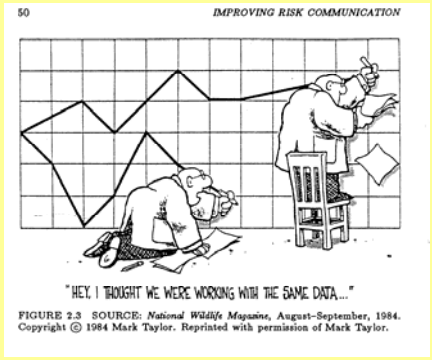
50 IMPROVING RISK COMMUNICATION

"HEY, I THOUGHT WE WERE WORKING WITH THE SAME DATA..."

FIGURE 2.3 SOURCE: *National Wildlife Magazine*, August–September, 1984. Copyright © 1984 Mark Taylor. Reprinted with permission of Mark Taylor.

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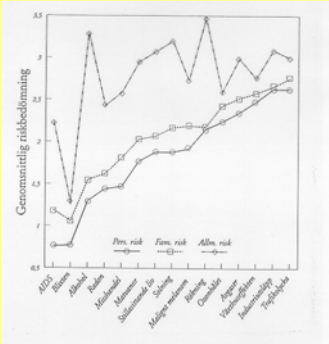
Mean risk judgements



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lay people

controversy

experts	low	high
low		EMF mobile towers
high	radon	nuclear power ↓ terrorist attacks

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RISK COMMUNICATION -

Risk communication is an interactive process of exchange of information and opinion among individuals, groups, and institutions.

Risk communication provides lay people/communities with the information they need to make independent judgements concerning risks related to health, security and environment.

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Risk communication shall <u>not</u>

try to clean up the marks after earlier mistakes
or
neglect infomation about risks for the public who will be effected by the risks
but
try to explain the risk

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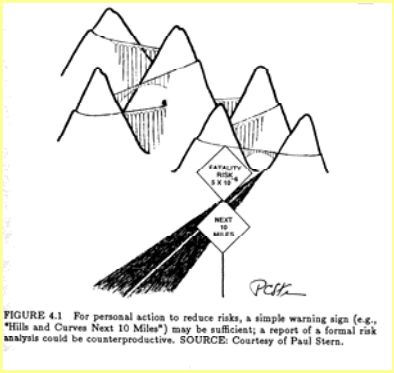

FIGURE 4.1 For personal action to reduce risks, a simple warning sign (e.g., "Hills and Curves Next 10 Miles") may be sufficient; a report of a formal risk analysis could be counterproductive. SOURCE: Courtesy of Paul Stern.

FEAR FACTORS 1(2)

Risks are generally more worrying (and less acceptable) if perceived to be:

1. involuntary (e.g. exposure to pollution) rather than voluntary (e.g. dangerous sports or smoking)
2. unequally distributed (some benefit while others suffer the consequences)
3. inescapable if personal precautions are not taken
4. arising from an unfamiliar or novel source
5. resulting from man-made, rather than natural, sources
6. the cause of hidden and irreversible damage, e.g. through the onset of illness many years after exposure

FEAR FACTORS 2(2)

Risks are generally more worrying (and less acceptable) if perceived to be:

7. posing a particular danger to small children or pregnant women or, more generally, future generations
8. containing the threat of a type of death (or illness/injury) that arouses particular dread
9. damaging identifiable rather than anonymous victims
10. poorly understood by science
11. subject to contradictory statements from responsible sources (or, even worse, from the same source)

A NEW DEFINITION OF RISK COMMUNICATION

Hazard = probability x magnitude

Outrage factors = all those things ignored by the experts that, nevertheless, worry people

RISK = HAZARD + OUTRAGE FACTORS
R = f(H,O)

OUTRAGE FACTORS (*Peter M. Sandman*)

−	+
1 Voluntary	Coerced
2 Natural	Industrial/Artificial
3 Familiar	Unfamiliar
4 Not memorable	Memorable
5 Not dreaded	Dreaded
6 Diffuse in time/space	Focused in time/space
7 Knowable	Not knowable
8 Controlled by me	Controlled by others
9 Fair	Unfair
10 Morally irrelevant	Morally relevant
11 Trust	No trust
12 Process responsive	Process unresponsive

RISK COMPARISONS

first choice
- with the same risk at different times
- with a standard (TLV)
- with other calculations ("worst cases")

secondary choices
- between doing or not doing measures
- between different alternatives of measures
- with the same risk at another place

population risk vs personal risk

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Trust and credibility

perceptions of knowledge and expertise
perceptions of openness and honesty
perceptions of concern and care

Security

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WHAT HAS BEEN LEARNT FROM COMMUNICATION WITH THOSE LIVING IN WATER DAMAGED BUILDINGS?

- Technical measurements on their own are not enough to allay people´s worry
- Communication should be established from the beginning
- Lay people/the public can often come up with practical solutions: take their suggestions seriously and use them if appropriate
- Keep the public informed and involved
- External experts are valuable – but not to many

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MY STRATEGY WHEN I MEET A GROUP OF PEOPLE LIVING IN WATER DAMAGED BUILDINGS?

- prepare yourself (history, reports, current status)
- introduce yourself so they know who you are and which institution you represent
- start with an introduction about how current problem usually are handled – what strategy (questionnaire?)
- discuss how to cooperate, a workgroup?
- answer all questions

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WHEN I MEET THE GROUP AFTER THE DIFFERENT INVESTIGATIONS!

- inform about the technique which has been used and how to interpret the results
- inform about what we know about the relation between problem environments and health outcome
- inform about the results (questionnaire/measurements) and let the group be involved in assessing the outcome
- leave material/inform about web-site and telefon
- answer all questions – take the time you need

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SEVEN CARDINAL RULES OF RISK COMMUNICATION

1 Accept and involve the public as a legitimate partner.

2 Plan carefully and evaluate your efforts.

3 Listen to the public´s specific concerns.

4 Be honest, frank and open.

5 Coordinate and collaborate with other credible sources

6 Meet the needs of the media

7 Speak clearly and with compassion

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Do not forget

The ultimate job of risk communication is to

-try to produce citizens that has the knowledge, the power and the will to assess their own risks rationally, which ones they want to tolerate and which ones they want to reduce or eliminate and act accordingly

A hard task – yes… impossible – no !!!

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