Risk communication – principles with special focus to damp building problems

Kjell Andersson MD MSc
Department of Occupational and Environmental Medicine
Örebro University Hospital

What is a risk? Risk communication?
"a risk is the probability that the exposure from a risk source will give negative consequences"

risk communication is separated from risk information

Peter Sandman:
"Improving dialogue with communities"

Why not test a low-dioxin-alternative?

Moldy house

Threats

Stress physical and defence reactions
"arousal" gives anxiety, stress reactions
fatigue, depression, sickness, irritability, reduction of the immune resistance, respiratory symptoms

Estimate
400 lung cancer/year
20-40 non-smoker (?)
RADON IS OUR BIGGEST ENVIRONMENTAL HEALTH PROBLEM

Tear down the houses

(an environmentalist)

Mean risk judgements

lay people

<table>
<thead>
<tr>
<th>controversy</th>
<th>low</th>
<th>high</th>
</tr>
</thead>
<tbody>
<tr>
<td>experts</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>low</td>
<td>EMF</td>
<td>mobile towers</td>
</tr>
<tr>
<td>high</td>
<td>radon</td>
<td>nuclear power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>terrorist attacks</td>
</tr>
</tbody>
</table>

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.

Risk communication shall not

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

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
Trust and credibility

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

Security

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

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

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

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

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 !!!