

# **Risk communication and health: an overview**

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# Health and medical issues are gaining media attention

- \* Farmed Scottish salmon
- \* Chicken flu
- \* MMR vaccine
- \* SARS

# **What is happening?**

**Growing level of public distrust toward regulators/policy makers**

**Public demanding access to information**

**Pluralism of science**

**Amplified by the media**

**Pluralism of information sources**

**Risks increasingly small and uncertain**

**Low hanging fruits have been regulated**

# What are the main drivers?

Researchers (specifically Fischhoff, Renn, Slovic and White) uncovered a series of drivers that influence how the public perceive risks:

**Voluntary-involuntary**

**Natural-technological**

**Control-non control**

**High probability and low consequence risk vis-à-vis low probability and high consequence risk (dread)**

**Familiar-non familiar**

# **Drivers continued:**

**Reproductive organs-non reproductive organs**

**Children-no children**

**Trust-no trust**

**Fair-not fair**

**The uncovering of these variables led to interest in how one can best communicate risks**

**Governments and industry alike took the view that we now know how the public perceive risks**

**Therefore lets develop communication strategies with our understanding of how people perceive risks**

# **Risk communication strategies that have been implemented**

**Top down (first attempt at risk communication)  
One way presentation of scientific facts**

**Dialogue (widely used today)  
Two way form of persuasive communication**

**Bottom-up (occurs from time to time)  
Stakeholder interaction in a social context**

# New thinking and theories

To date many of the implemented risk communication programmes have not worked

E.g. it is difficult to site and build hazardous installations or any large infrastructure projects

Academics have identified several reasons for this:

Social amplification of risk

Risks can be socially amplified or attenuated

Narrative approach

People like anecdotes

Trust

Need to establish trust. Distrust leads to ineffective communications.

It is 9 times easier to destroy trust than to gain it

**Of these theories by far the greatest attention has been placed on trust**

**It is envisioned that trust can explain up to 50 per cent of how public perceive risks**

**High public trust –low public perceived risk**

**Low public trust-high public perceived risk**

**Tough regulator-high public trust**

**Weak regulator-low public trust**

**Example of this:**

**The Barseback nuclear plant—incident  
August 1992**

**You may have heard that under the last year  
there has been a great deal of discussion  
concerning the Barseback plant and the  
Danes. Do you feel that Barseback is a safe  
nuclear power plant?**

**Yes 60**

**No 27**

**Maybe 9**

**Do not know 5**

**N=100**

## **Barseback 2**

**(If yes) Why do you say this? (let the respondent him/herself come up with an answer)**

<b>I believe in Swedish industry</b>	<b>57</b>
<b>It is a good plant</b>	<b>5</b>
<b>Public information is widely available</b>	<b>4</b>
<b>Do not know</b>	<b>2</b>

## **Barseback 3 (Denmark)**

**You may have heard that under the last year there has been a great deal of discussion concerning the Barseback plant and the Danes. Do you feel that Barseback is a safe nuclear power plant?**

<b>Yes</b>	<b>34</b>
<b>No</b>	<b>53</b>
<b>Maybe</b>	<b>4</b>
<b>Do not know</b>	<b>9</b>

**N=100**

## **Barseback 4 (Denmark)**

**Why do you say this? (let the respondent him/herself come up with an answer)**

**I believe in Swedish industry 31**

**Public information is widely available 5**

**It causes less damage than other energy sources 1**

**N=34**

## **Risk communication issues—also discussed in the health sector: Siting BSL-4 facilities Galveston, Texas**

**\* University of Texas Medical Branch (UTMB) determined the need for BSL-4 in their area in 1995**

**\* UTMB recognised early the need for effective public engagement strategy**

**–Began working with CDC communications experts**

**–Strategy included:**

- Focus groups, internal and external**

- Internal meetings**

- Dialogue meetings with community leaders**

**and local media**

## **Galveston (continued)**

### **Strategy, continued:**

- Experts did radio Q and A Sessions**
- Two large public meetings were held**
  - First meeting was hostile**
  - Second meeting was much less hostile**
- Currently little or no opposition, even though UTMB has been involved in several recent controversies**

# **Risk communication and acrylamide**

- **In 2001 Tornqvist measured acrylamide levels in fried carbohydrates**
- **Found more than 1000 times higher levels of acrylamide than raw or boiled potatoes.**
- **Showed results to SLV fall 2001.**

# **Risk communication and acrylamide**

- SLV took the information seriously and sought to verify results.**
- February 2002 verification complete-SLV wanted to go public.**
- Tornqvist wanted to wait till the article was published.**
- April 2002 Tornqvist gets article results accepted.**
- Leaks start to appear:**
  - SLV have informed colleagues regarding findings**
  - Lab involved publishes a 2 page spread in their external customer journal**

# **Risk communication and acrylamide**

- **Press invitation sent out April 23rd:**

- **"Researchers at Stockholm University have found a substance that can cause cancer and which is formed during cooking a wide range of food stuffs. The National Food Administration have in a pilot study found the substance in many staple foods. The levels (of the substance) are high and new research findings will have international importance with regard to risk valuation, food production and consumption."**

## Risk communication and acrylamide

### Immediate press reaction within the hour

- Researchers called up
- Media searches were conducted
- Editor of Journal of Agricultural and Food Chemistry contacted

Information officers and researches decided, as planned not to go public before the press conference

- information vacuum

# Risk communication and acrylamide

## Press conference April 24th:

- 150 journalists show up
- Live coverage by Swedish television
- Biggest press conference since assassination of Olof Palme in 1986

# **Risk communication and acrylamide**

**Dr Busk (Director for Research at SLV) is quoted saying:**

**"I have been in this field for 30 years and I have never seen anything like this before. The discovery that acrylamide is formed during the preparation of food, and at high levels, is new knowledge. It may now be possible to explain some of the cases of cancer caused by food." (Mason 2002)**

**Yet SLV refuses to withdraw any products with high levels of acrylamide and states more research is needed.**

# **Conclusions: what are some of the take home lessons?**

**The importance of risk perception factors**

**The changing communication environment**

- \* Public distrust of authorities**

- \* Media often amplifying risks**

**The importance of doing one's homework**

**The role of not over sensationalising**

**Working with the media and not against them**

- \* Developing reporting guidelines**

- \* Need to build up trust and not destroy it**