

## Risk communication and occupational limit values-need for a better understanding

Ragnar Lofstedt PhD  
Professor and Director  
King's Centre for Risk Management  
King's College London

## We live today in a “post trust” society

Publics and stakeholders no longer trust regulators, politicians or industry

- Regulatory scandals
- Dioxin in Belgian chicken feed
- Tainted blood in France
- Mad cow disease in the UK and elsewhere
- Foot and mouth disease

Increasingly aggressive media

- Headlines selling stories
- Risks are reported and not benefits

“Elites” no longer control news flow

- 24-7 television
- Internet
- Blogs

(every opinion about every risk is always available)

## Decline in public trust

<b>Early 1980s</b>		<b>Mid 1990s</b>	
Finland	65		33
Germany	51		29
Spain	48		37

## In post trust environment

### **Proactive risk communication is key**

- Dialogue
- Transparency
- Humble and honest

### **will build trust**

#### **while:**

- Secrecy
- Back stabbing
- Arrogance

### **will destroy trust still further**

### **Similarly need to do one's homework**

Reduce element of surprise

## The same applies for setting occupational exposure limits

Need to work together

- Transparency
- Dialogue
- Cut out back stabbing
- Do ones homework

## The vinyl chloride case

(see Badaracco 1985; Brickman et al 1986)  
US-what not to do

1973 VC related cancers in humans were noticed  
ignorance of the dose response curve  
what was a safe level of exposure?  
fear chemicals=cancer

1974 (April) OSHA issues an statement-limit exposure at 50ppm

1974 May-worldwide death toll of angiosarcoma of the liver 19

1974 May OSHA publishes a proposed standard of VC at 1ppm

## US vinyl chloride - continued

1974 June-US industry notes that this limit is not technically feasible

1974 June –unions call for a zero limit-workers are used as guinea pigs

1974 July-industry argues that angiosarcoma cases were result of very high exposure 10-20 years earlier

1974 October final OSHA standard

“The standard sets an exposure limit of 1ppm averaged over any eight hour period, and a ceiling of 5ppm averaged over any period not exceeding 15 minutes.”

## US vinyl chloride- continued

Within 2 minutes of announcement: SPI, Hooker, Union Carbide, Firestone and a number of other US chemical firms filed suits in various circuit courts

“Society of the Plastics Industry Inc v.OSHA”  
absence of medical justification for a 1ppm standard and infeasibility

1975 January –court rules in favour of OSHA

1976 April-VC and PVC industries have generally complied with OSHA  
cost 200-280 million dollars

## Vinyl chloride-Sweden what you should do

Open dialogue between industry, trade unions and the regulators

Consensus-strong levels of trust

1ppm was agreed quickly and painlessly

## Conclusions

lets find a consensual rather than an adversarial solution

lets collaborate and understand each other's positions

keep the lawyers away

develop proactive risk communication strategies where ever possible