



**Radiological Protection Institute of Ireland**  
An Institiúid Éireannach um Chosaint Raidiólaíoch

# Dioxin contamination in food lessons for NRO crisis communication

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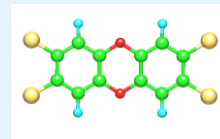
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## Dioxins



- **By-products of industrial and chemical processes**
- **Accumulate in the fat of animal species**
- **Persistent, with half-life of 7 to 11 years**
- **Approximately 90% of human exposure due to consumption of contaminated food**
- **Exposure to high levels**
  - **Short-term → skin lesions**
  - **Long-term exposure → increased risk of cancer**
- **Similarities with radioactivity**



## The Belgian dioxin crisis in 1999

- Jan - contamination occurred
- Feb - effects of contamination noticed
- Apr - reported to national authorities
- Apr - dioxin confirmed by analysis
- May - public informed
- May – European Commission informed
- May - withdrawal of contaminated foodstuffs from sale and export ban



## The Irish dioxin crisis in 2008

- 28 Nov - Contamination identified during routine farm testing
- 1 Dec - Movement of animals restricted
- 2 Dec - Source of contaminated feed identified
- 4 Dec - Movements on other affected farms restricted and public informed
- 5 Dec – European Commission informed
- 6 Dec - All products manufactured between Sept and Dec recalled
- 7 Dec - Press statement – “no adverse health effects”
- 11 Dec - Products returned to market



## Effective crisis management

- **Timely public communication**
- **Acknowledgement of real and perceived risks**
- **Control of stigma**



## Timely public communication

### **Belgian crisis: one month delay led to**

- **allegations of cover-up**
- **accusations of serving economic rather than public health interests**
- **blame directed at Government**

### **Irish crisis: prompt communication led to**

- **sense that crisis was being managed**
- **trust that problem would be resolved**

## Timely public communication

- Establishes credibility in the organisation providing the information
- Helps shape public attitudes towards the risk
- Sets the pace for resolution of the problem



## Acknowledgement of real and perceived risks

### Belgian crisis

- Uncertainty about real extent of contamination
- Authorities projected confidence and optimism
- Disagreement between EC and Belgian authorities in assessing the risk

### Irish crisis

- Uncertainty about real extent of contamination
- Clear statement of risk assessment issued by Food Safety Authority of Ireland



## Acknowledgement of real and perceived risks

- Essential for building trust and credibility
- Communicators need to understand what people know and believe
- Communication is undermined by denying real risks
- Also by ignoring non-risks perceived by the public as real risks



## Control of stigma

### Belgian crisis

- Media conveyed the risk as unacceptable rather than focussing on the risk of actual exposures
- Information website and call centre established, but too late

### Irish crisis

- Authorities provided detailed information about the actual risks ....
- And about efforts to reduce the risk to public health



## Control of stigma

- **Poorly understood risks are not readily accepted so accessible, understandable information must be provided**
- **Stigma can be reduced by clearly explaining efforts to reduce the risk, and levels of uncertainty**
- **Media has a large influence on public perception of seriousness of crisis**
- **Effective crisis management can exert a positive influence on the media**



## Lessons for crisis communication

- **Risk assessment**
- **Risk management and decision making**
- **Communicating risk and public information**
- **Public concerns**
- **The international dimension**

**LESSONS  
LEARNED**



## **Risk Assessment**

- **Plan for a range of scenarios, including for low probability/high consequence events**
- **Maintain rapid and effective surveillance systems**
- **Ensure risk assessments are based on good science**
- **Include all relevant bodies**

## **Risk Management and Decision Making**

- **Ensure clear leadership at all stages**
- **Coordinate effectively between all agencies**
- **Establish a credible, open and responsive regulatory system**
- **Think “worst case scenario” (better to relax a ban than to extend it)**



## **Communicating risk, public information and public concerns**

- **Include public information as an integral part of all emergency plans**
- **Provide as much detail as possible about the nature of risk, what is still unknown and efforts to reduce uncertainty**
- **Decide in advance the list of issues to be covered in early news conferences**
- **Agree appropriate experts in advance**
- **Ensure consistency of message**
- **Address real and perceived risks**
- **Ensure that actions match words**





## The international dimension

- **Keep neighbouring countries fully informed of developments**
- **Use appropriate international communication channels**
- **Assist international organisations in their risk assessments**
- **Where possible, use internationally agreed limits**

