

How to communicate uncertainty? – Practical Examples of a public scientific institution

Dr. Suzan Fiack, Head of Press and Public Relations, Department Risk Communication, German Federal Institute for Risk Assessment (BfR)

Uncertainty is an integral part of science. Communicating risks is not only about communicating sound knowledge, but also about dealing with the unknown and communicating uncertainty. This challenge is particularly relevant for organizations such as the German Federal Institute for Risk Assessment (BfR), whose task is to advise policy-makers and inform the public on the basis of scientific opinions - for example on food, everyday products and chemicals. When dealing with uncertainty, the public and decision-makers want to know what the various outcomes might be and how likely they are. The way scientists report uncertainties and the way public institutions communicate them to decision-makers, stakeholders and the general public can change perceptions of the risks and benefits of assessments and affect relevant policy decisions. This can also have a direct or indirect impact on individuals' decisions.

Using some concrete examples (e.g. fipronil in eggs, glyphosate in breast milk, ethylene oxide in sesame seeds) different challenges and approaches are presented and discussed.

Background reading:

Brand, F., Dendler, L., Fiack, S. *et al.* Risikokommunikation politikberatender Wissenschaftsorganisationen: Ein Themenaufriss am Beispiel des Bundesinstituts für Risikobewertung. *Bundesgesundheitsbl* **65**, 599–607 (2022).

<https://doi.org/10.1007/s00103-022-03520-3>

Leitfaden für die gesundheitliche Bewertung (BfR)

Veröffentlicht: 16. Januar 2019

<https://www.bfr.bund.de/cm/350/leitfaden-fuer-gesundheitliche-bewertungen-bf.pdf>

Guidance of the European Food Safety Agency (EFSA):

Guidance on Communication of Uncertainty in Scientific Assessments

Veröffentlicht: 16. Januar 2019

<https://www.efsa.europa.eu/de/efsajournal/pub/5520>