

Risk communication: challenges and new formats

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Risk Communication at the BfR



• Legal remit to communicate risk

Risk communication is defined as a **continuous and interactive** process and characterised by a participatory dialogue with various stakeholders.

Principles :

Transparency

Reliability

Greatest possible openness

Examples

Aluminium in food and cosmetics

1



Live Stream and Interactive Online Forum

Antibiotic resistance

2



Representative Flash Survey and Video

Arsenic in rice

3



Risk Profile and Consumer Recommendations

Glyphosate

4



Trust and Reputation

Poisoning accidents among children

5



German Price for Online Communication

Background

A certain proportion of the population probably reaches the tolerable intake level through food alone.

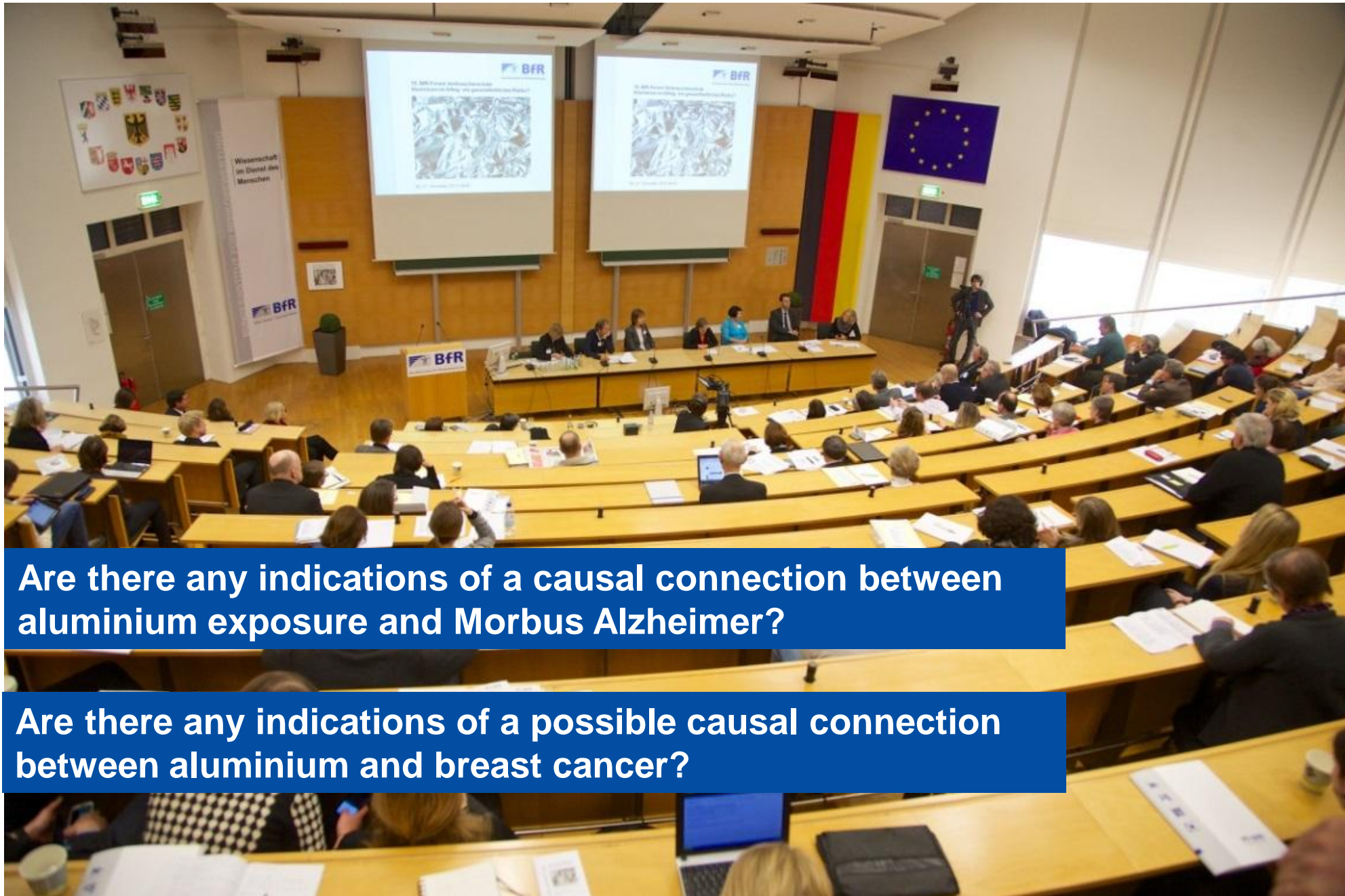


In the case of **additional long-term** use of cosmetic products containing aluminium, the tolerable weekly intake **may be** exceeded.

High aluminium doses: neurotoxic effects and teratogenic effects in animals. Some studies discuss a link between aluminium intake and the development of **Alzheimer's disease and breast cancer.**

But: No scientific evidence **proving an unequivocal link** between increased aluminium intake and Alzheimer's disease or breast cancer has so far been presented.

15th BfR Consumer Protection Forum 2014: Examples



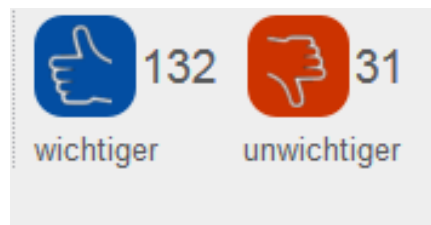
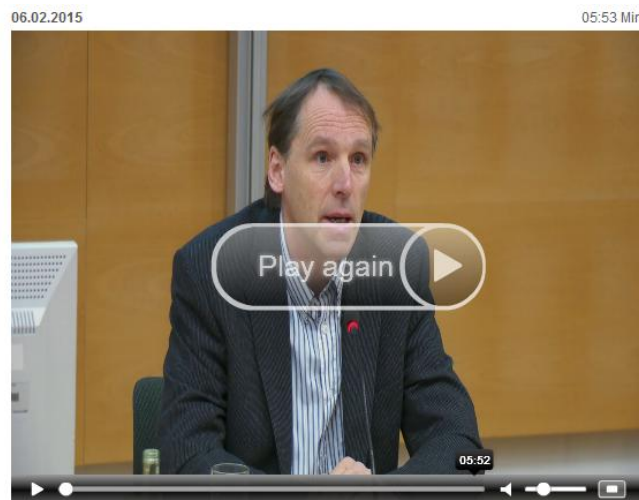
Are there any indications of a causal connection between aluminium exposure and Morbus Alzheimer?

Are there any indications of a possible causal connection between aluminium and breast cancer?

Live Stream and Consumer Questions

Fifth edition of the interactive online forum "Consumers Ask Questions - the BfR Provides Answers"

- Consumers can ask questions (in German) online
- Opportunity to assess all submitted queries
- The three questions that get most votes were answered by the BfR in a video message
- In addition, scientists answered further questions at the 15th BfR Consumer Protection Forum



http://www.bfr.bund.de/en/aluminium_im_alltag__ein_gesundheitliches_risiko_-192905.html?current_page=1

Press Conference: Communicating uncertainty

Aluminium in everyday life: a health risk? Press Conference



Professor Dr. Dr. Andreas Hensel
President of the Federal Institute for Risk Assessment

Professor Dr. Andrea Hartwig
Full Professor for Food Chemistry and Toxicology
Karlsruhe Institute of Technology

Professor Dr. Dr. Alfonso Lampen
Head of the Food Safety Department at the BfR

Professor Dr. Dr. Andreas Luch
Head of the Chemicals and Product Safety Department at the BfR

Excerpt Press Review (Translation BfR)

26.11.2014

Berlin (dpa) – The use of aluminium to counteract underarm perspiration should be reduced as a precautionary measure in the opinion of the experts. Specialists at the Federal Institute for Risk Assessment **see a need for further research as too little is still known of the long-term effects of the substance in the human body.**

Ahlener Tagblatt (27.11.2014)

More Research on Aluminium in Deodorants

Badische Neuste Nachrichten (27.11.2014)

Aluminium under Suspicion

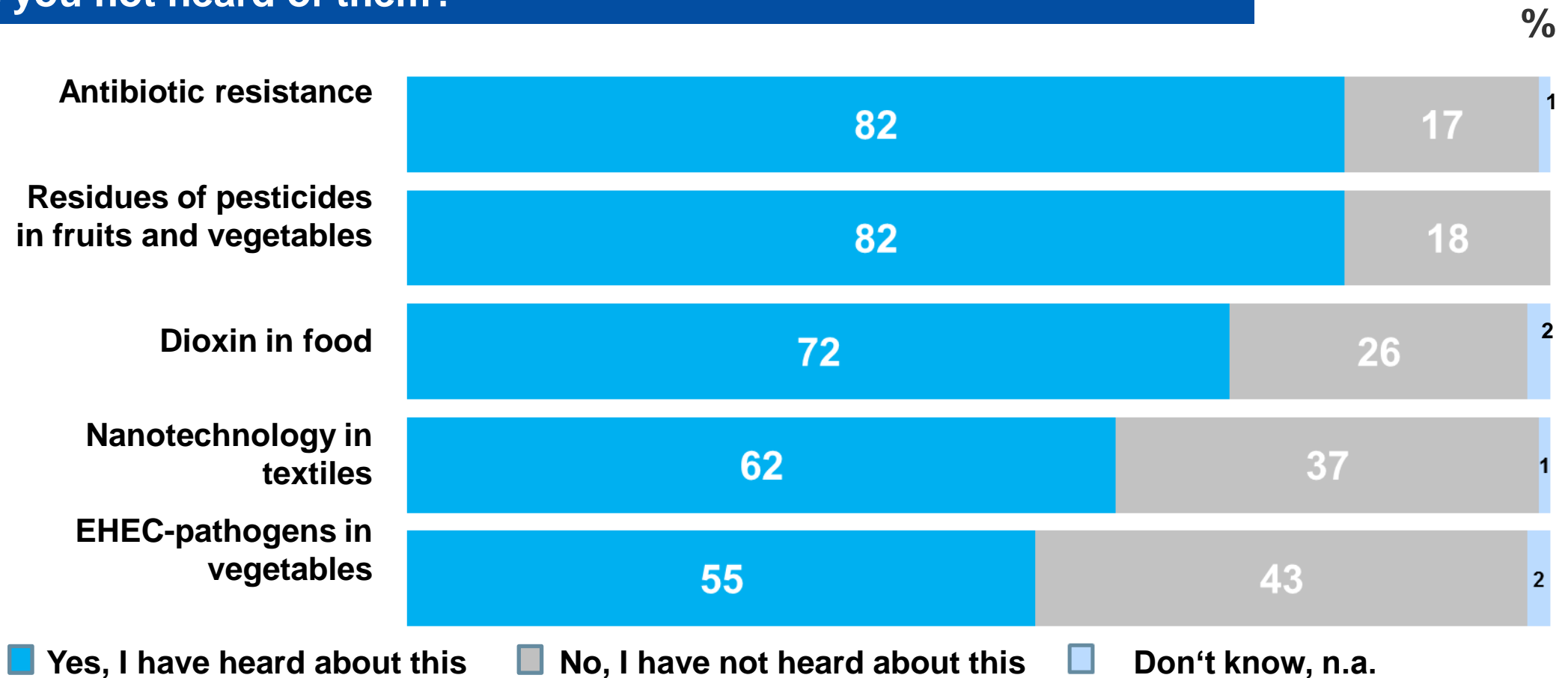
– Experts examining the effects of the heavy metal

Tagesspiegel (8.02.2015)

Researchers do not know yet how much aluminum is absorbed through the skin.

Representative Flash Survey: Awareness of Health and Consumer issues

Have you heard of the following health and consumer issues or have you not heard of them?



BfR-Verbrauchermonitor (10/2014), n = 1.012

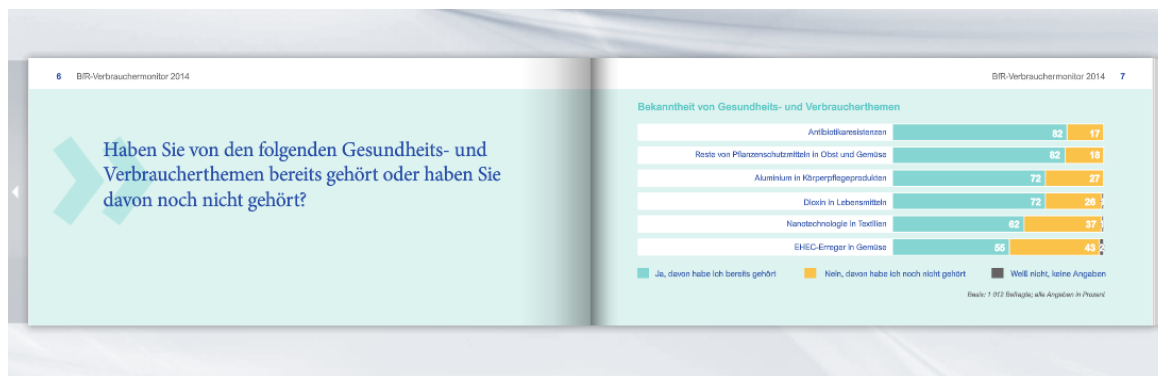


BfR 11/2014; n = 1.004

Representative Flash survey: Risk perception of antibiotic resistance

82 % of respondents said they had heard of antimicrobial resistance

64 % of consumers are concerned about it.



19 % think it is likely that they will come into contact with pathogens **in their own household**.

http://www.bfr.bund.de/epaper_verbrauchermonitor_2014_deutsch/#10

Videos

**What to do with the chicken in the kitchen?
A lack of kitchen hygiene can make you sick
A BfR film advices consumers about kitchen hygiene**



- 3.458 Views in the first three weeks
- 200 DVDs in German and English

„I would like to compliment you for the nice initiative“

Italian Ministry of Health

"We really like your video."

Operators of senior citizens centers

"We would like to show the film to our students in our module food safety."

University Fulda

"For our training for childminders your film would be very helpful and supportive."

Weimar City Council

Conclusions of the BfR health assessment on arsenic in rice and rice products 2015



The intake **level of inorganic arsenic compounds through rice and rice products is relatively high.**

A safe intake level not associated with an increased risk of cancer **cannot be defined** for the carcinogenic effect of inorganic arsenic compounds.

After making an assessment based on the Margin of Exposure concept, the BfR arrives at the conclusion that health impairments concerning the risk of cancer are possible.

Levels of inorganic arsenic compounds in foods should be reduced to an unavoidable minimum (**ALARA principle**).

Consumers cannot tell how much arsenic is in their food



The BfR recommends consuming products such as rice cakes or rice flakes/rice pudding **in moderation** and varying these products with products based on other cereals.



Parents are advised not to feed their **babies or toddlers exclusively with rice-based drinks** such as rice milk or food such as rice pudding.

Nevertheless, rice should remain part of a balanced diet.

In light of this, the BfR welcomes **the European Commission's decision to introduce maximum limits** for inorganic arsenic in rice and rice products at a European level.

The recommendations by the BfR will remain valid even after the introduction of maximum limits.

Risks at a glance: the BfR risk profile

 BfR Risk Profile: Arsenic in Rice and Rice Products (Opinion No 018/2015)	
A Affected group(s)	1. Children 2. General public 
B Likelihood of a health impairment	Practically excluded Unlikely Possible Likely Assured
C Severity of the health impairment	No impairment Slight impairment [reversible/irreversible] Moderate impairment [reversible/irreversible] Severe impairment irreversible
D Reliability of available data	High: The most important data are available and consistent Moderate: Several important data are missing or inconsistent Low: Numerous important data are missing or inconsistent
E Controllability by consumers	Control not necessary Controllable through precautions Controllable through avoidance Not controllable

E: As consumers cannot recognise the levels of inorganic arsenic in rice or rice products, they cannot control them either. They can reduce their intake of arsenic through rice and rice products, however, by varying their consumption of cereal types and products (reduction of the rice percentage).



- One of the **most widely used active substances** in pesticides worldwide to prevent unwanted plant growth in crop cultures
- Germany: designated **Rapporteur Member State (RMS)**
- **Re-assessment** is a routine procedure controlled by the European Commission
- The German report has been sent to the **European Food Safety Authority (EFSA)**
- Exceptionally high **media attention**
- **Public debate**, huge amount of questions to the BfR

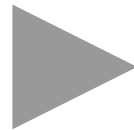
The BfR has finalised its report for the re-evaluation of glyphosate (2014)

> 1000 sources

new toxicological studies were evaluated for the first time

available toxicological studies were re-assessed

publications from scientific journals have been considered



The available data do **not** show **carcinogenic** or **mutagenic** properties of glyphosate nor that glyphosate is **toxic to fertility, reproduction or embryonal/fetal development** in laboratory animals.

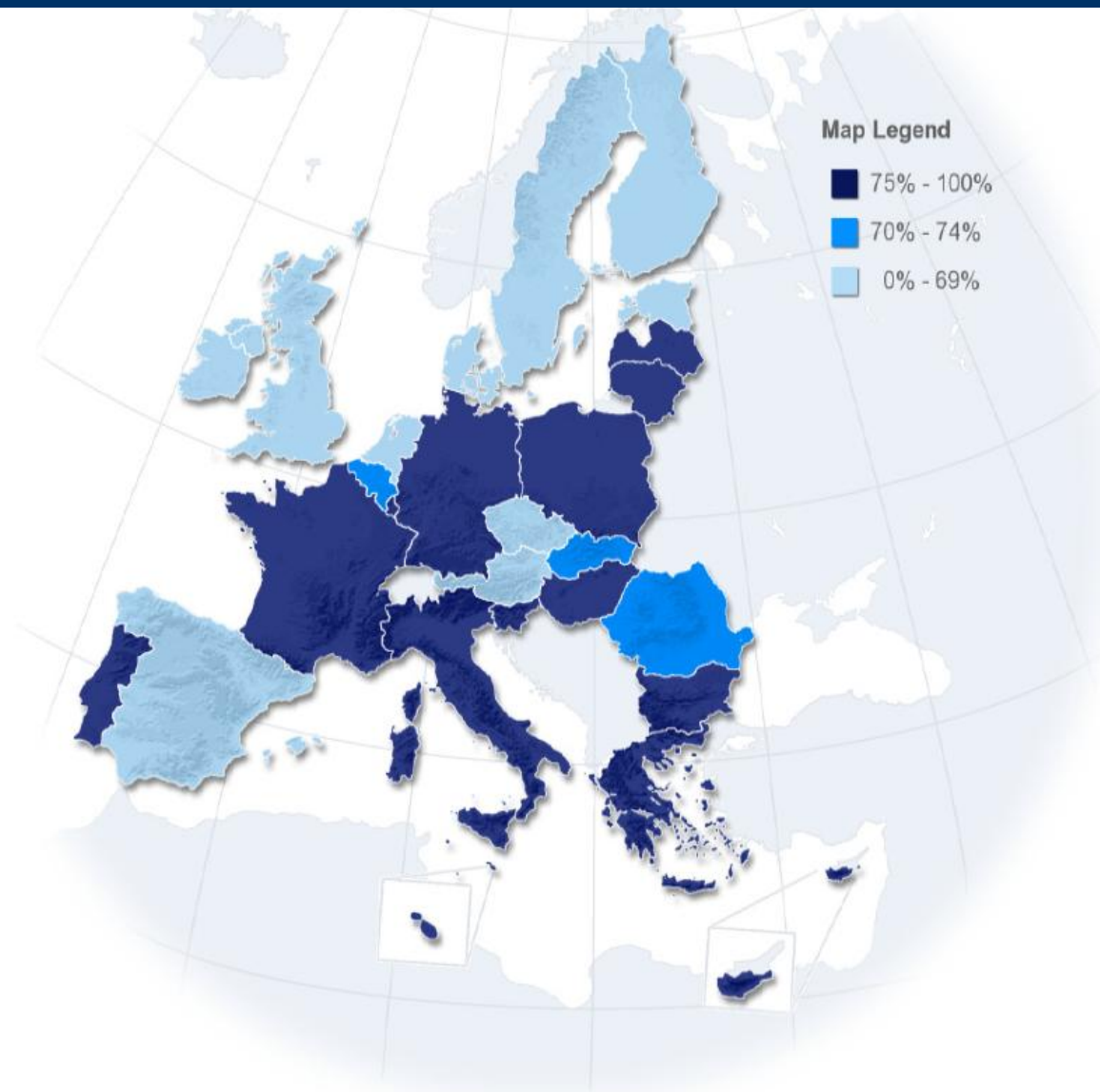
Critical Debate

Glyphosate kills.

(www.bund.net; accessed September 2015)

Perception of Pesticide Residues

Pesticide residues in fruit, vegetables or cereals: Geographical distribution of “Total worried”



75 % are **worried** about pesticide residues in fruit, vegetables or cereals (Germany)

78 % associate the term ,**toxic**‘ with food produced with pesticides (Germany)

67 % think that pesticide residues in **food** are **illegal** (Germany)

Sources: Eurobarometer 2010, BfR 2009

BfR symposium on the reassessment of the health effects of glyphosate-containing pesticides

To support public debate on the risk assessment of glyphosate, the BfR hold

a scientific symposium on 20th January 2014

about the

Safety of plant protection products containing glyphosate

at
ICC Berlin, Germany during Green Week

Dialogue with stakeholders



Press Conference



Does glyphosate cause cancer? – Diverging assessments within WHO should be clarified by experts

- Evaluation of glyphosate by relevant national, European and other international institutions, including the WHO / FAO Joint Meeting on Pesticide Residues (JMPR)
→ **not carcinogenic**
- Meeting of the International Agency for Research on Cancer (IARC) of WHO in Lyon (March 2015) with experts on glyphosate
→ **probably carcinogenic to humans (carcinogen group 2A)**

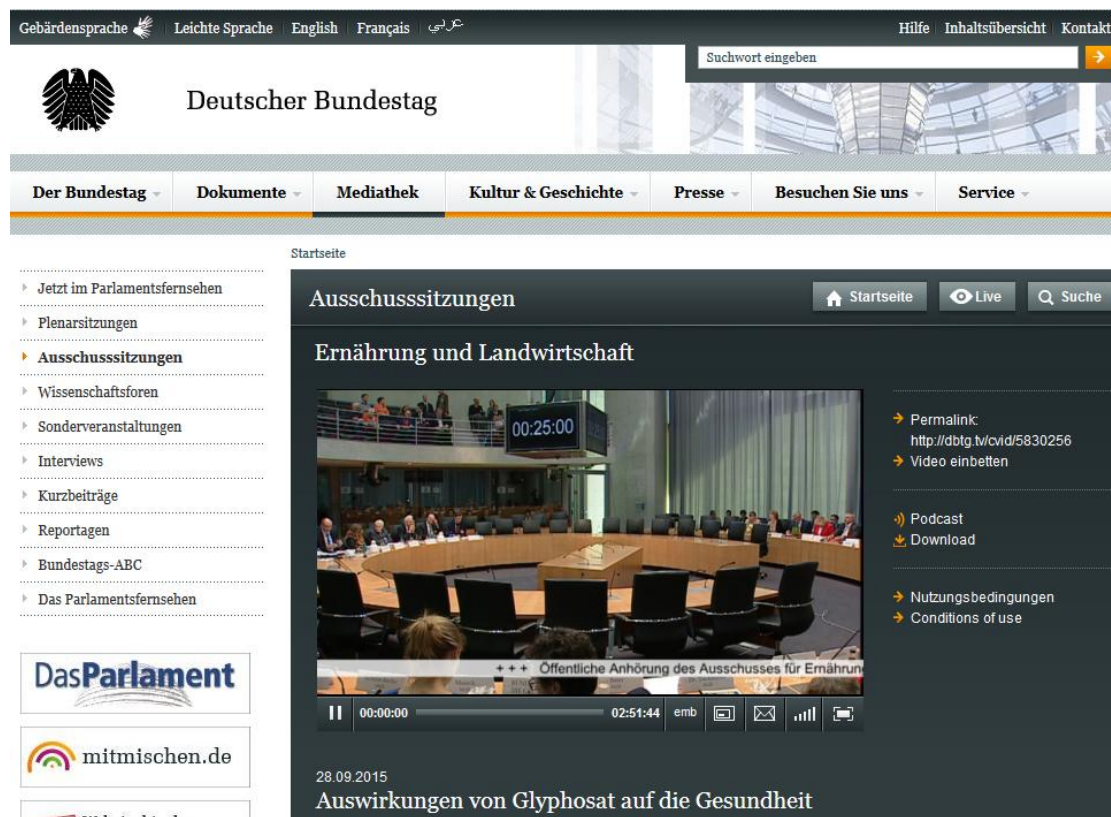
WHO has set up an "*ad hoc expert task force*" for clarifying the reasons for the diverging assessments of IARC and the JMPR (divergence within the WHO)

BfR reviewed monograph of the International Agency for Cancer Research (IARC) on glyphosate

BfR Communication No. 024/2015 of 30 July 2015

Does glyphosate cause cancer?

German Bundestag and Examples for Media Reports



The screenshot shows the official website of the German Bundestag. At the top, there are navigation links for different languages: Gebärdensprache, Leichte Sprache, English, Français, and العربية. The main header features the Bundestag logo and the text 'Deutscher Bundestag'. Below this is a search bar and a navigation menu with categories like 'Der Bundestag', 'Dokumente', 'Mediathek', 'Kultur & Geschichte', 'Presse', 'Besuchen Sie uns', and 'Service'. The main content area is titled 'Ausschusssitzungen' (Committee Sessions) and 'Ernährung und Landwirtschaft' (Nutrition and Agriculture). It displays a video player for a public hearing titled 'Öffentliche Anhörung des Ausschusses für Ernährung und Landwirtschaft' (Public Hearing of the Committee for Nutrition and Agriculture) on the topic 'Auswirkungen von Glyphosat auf die Gesundheit' (Effects of Glyphosate on Health). The video player shows a timestamp of 00:25:00 and a progress bar. To the right of the video player, there are options for 'Permalink' (http://dbtg.tv/vid/5830256), 'Video einbetten' (Embed video), 'Podcast', 'Download', 'Nutzungsbedingungen' (Terms of use), and 'Conditions of use'. The date '28.09.2015' is also visible.

German Bundestag Committee for Food and Agriculture 28.09.2015

Glyphosate: health effects to users and consumers as well as animal health and possible consequences in terms of the authorization as pesticide active ingredient.

29.09.2015 ZDF

Frontal21 : glyphosate and the dubious role of German authorities!

28.09.2015 Tagesspiegel

Interview dispute about important pesticide " No cancer risk by glyphosate"

(Translation BfR)

Poisoning accidents among children: New App Facilitates First Aid and Prevention

The app is an important information source and reference work, even without a direct internet link. In an emergency, the app can be used to call the responsible poison information centre directly.



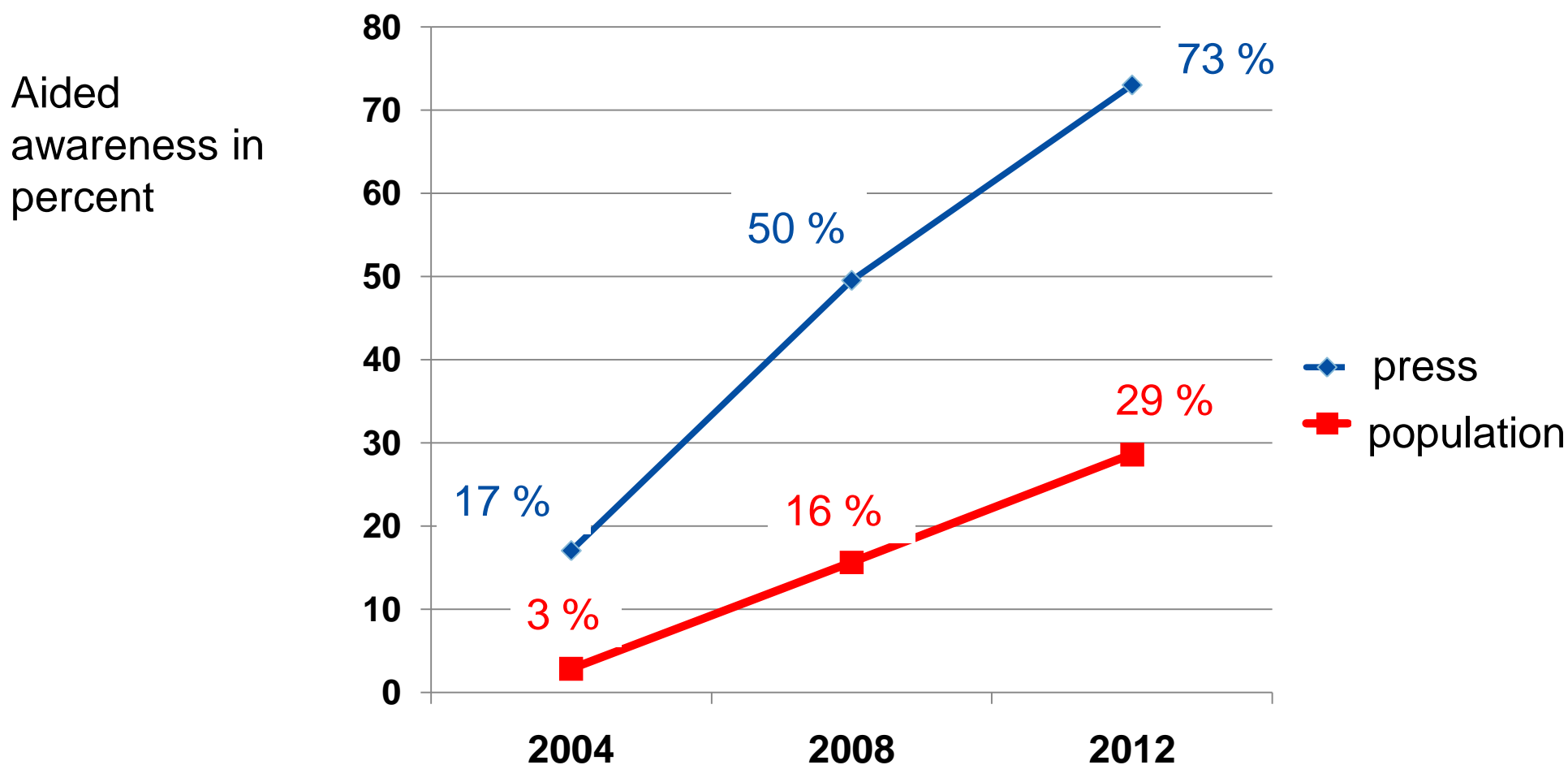
Vergiftungsunfälle bei Kindern

Im Notfall
bin ich vorbereitet.

In der kostenlosen App des BfR finden Sie Informationen zur Vorbeugung von Vergiftungsunfällen bei Kindern und zu Erste-Hilfe-Maßnahmen. Alle Hinweise zu Gefahrenstoffen im Haushalt sind auch ohne Internet abrufbar. Im Notfall kann direkt aus der App ein Giftinformationszentrum angerufen werden.



Evaluation of awareness of BfR: Positive Trend



Communication goals

- Prevent crises before they arise
- Strengthen confidence (experts, general public)
- Understanding of messages

Examples for Evaluation

- Awareness survey
- Years Press review
- Web statistics

Thank you for your attention

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