



Experiences of crisis management in Germany

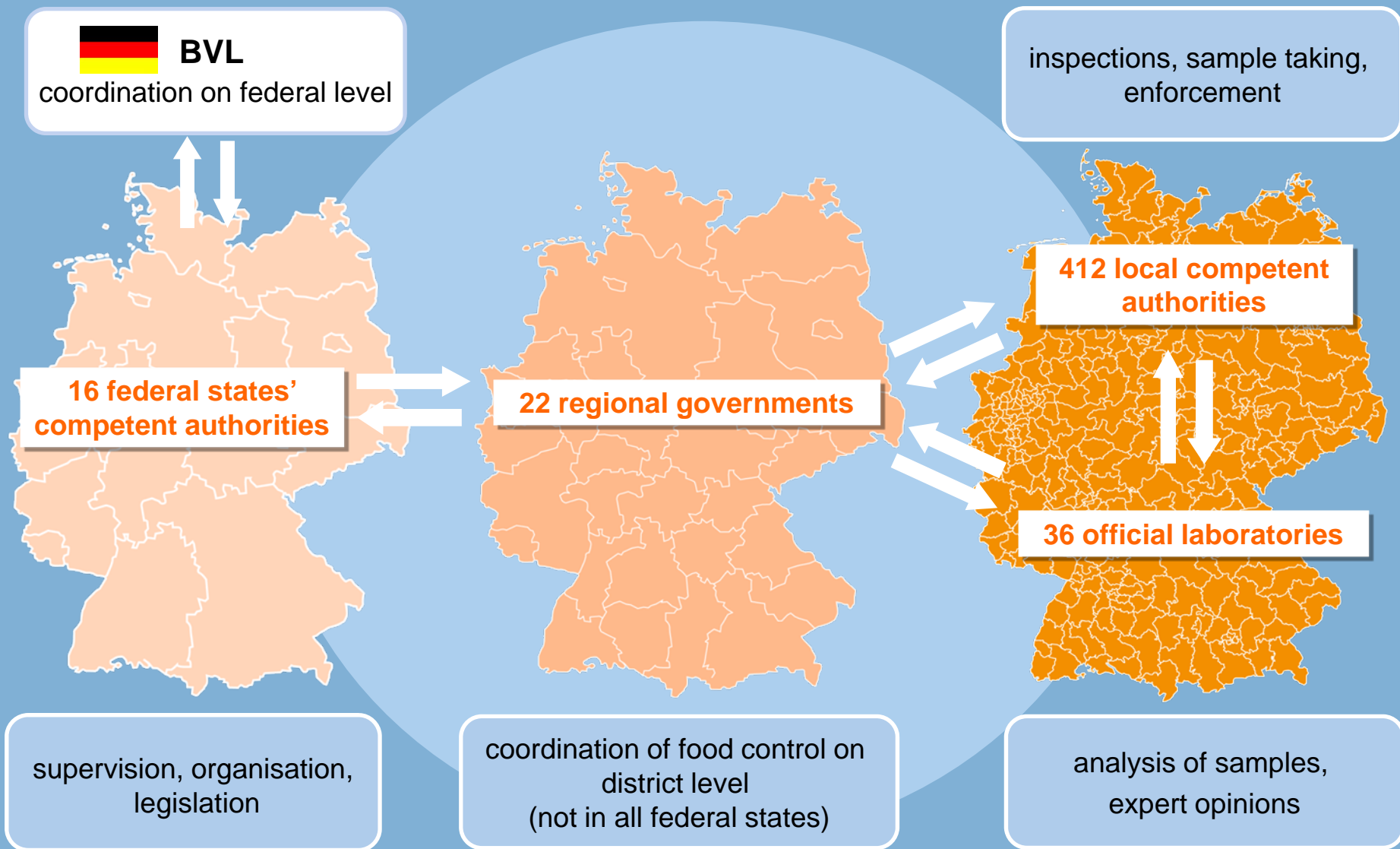
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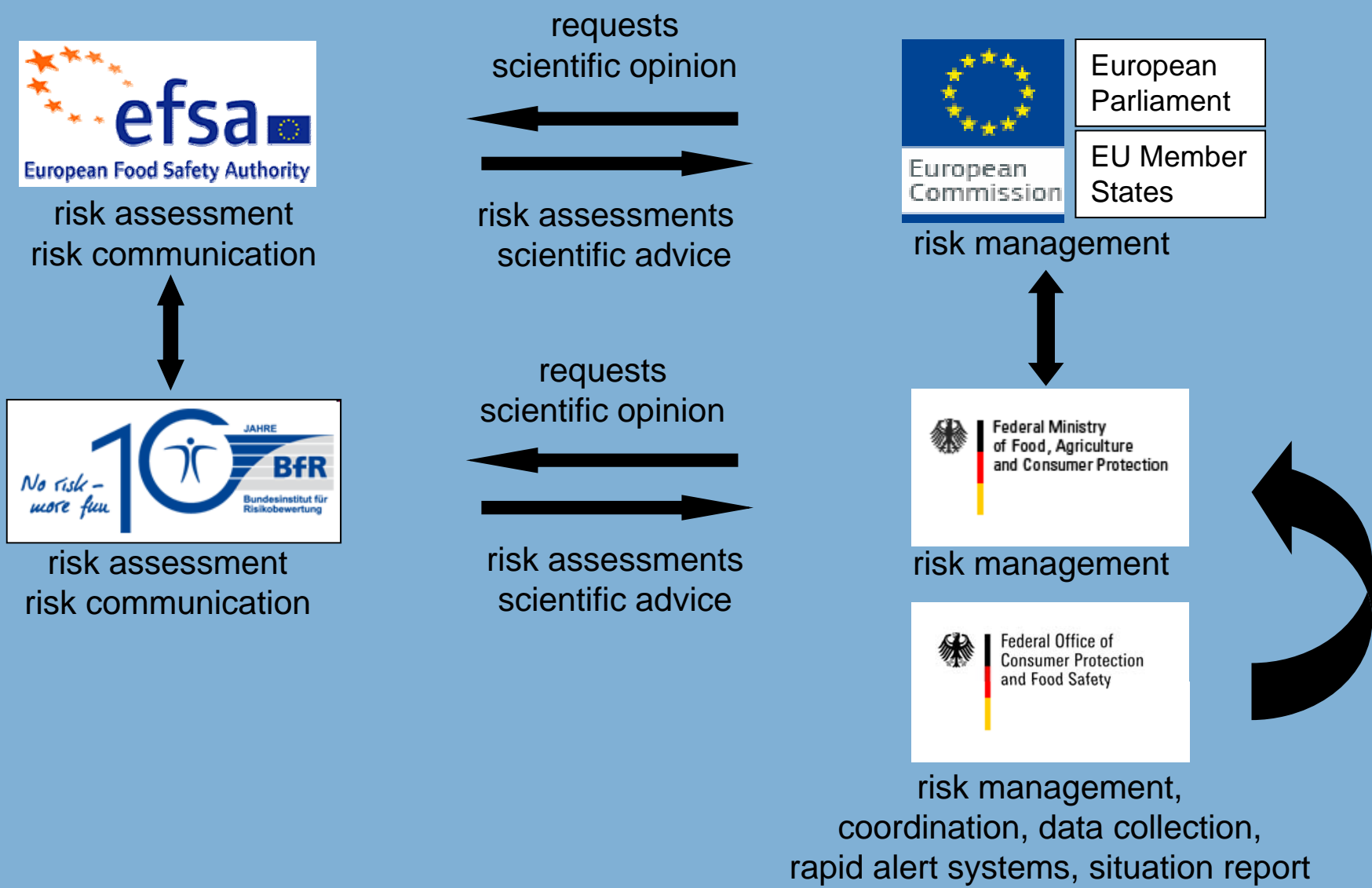


- Food safety controls and crisis management in Germany
- The 2011 *Escherichia coli* (STEC) O104:H4 outbreak
- Creation and implementation of the task force for food and feed safety
- The 2012 norovirus outbreak in canteens of schools and kindergartens

Food Safety Controls in Germany



Risk Assessment + Risk Management



Serious Incidences and Crises in the Year 2011

- Dioxins in vegetable feed fat for pigs and poultry
- Chloramphenicol in vitamin A/D3 premix from China
- Radioactive contamination in Japan
- **Shiga toxin-producing *Escherichia coli* (STEC) O104:H4 in sprouted seeds**

The *E. coli* (STEC) O104:H4 Outbreak in Germany

Reviewing the EHEC crisis

Total of 2.987 cases of EHEC gastroenteritis in Germany

885 cases of HUS

53 cases died

Start: second week of May 2011

End: July 5th, 2011



Photograph by Lichtbild
Austria - pixelio.de



... after 10 days into the outbreak investigation

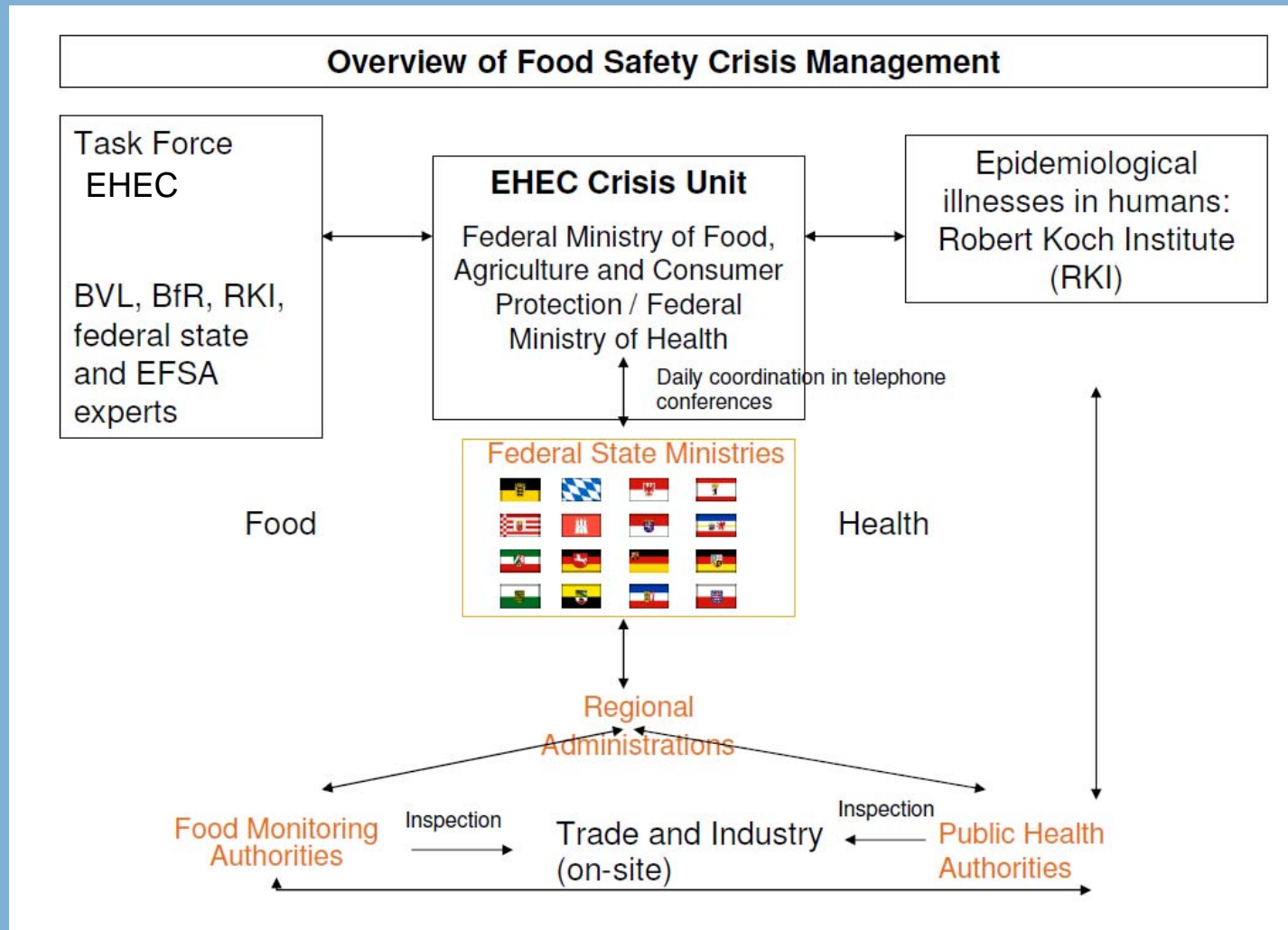
- STEC O104:H4 was not found in any of the food samples analysed
- Lack of a validated method for detection of STEC in vegetables
- Risk-based inspections along the food chain without positive findings
- The usual food-borne outbreak investigations were not successful
- Pressure to find the STEC contaminated food rose steadily

Action taken: establishment of an EHEC Task Force

- to develop new approaches for the outbreak investigation
- in close collaboration with all players of the outbreak investigation



EHEC Outbreak Crisis Management





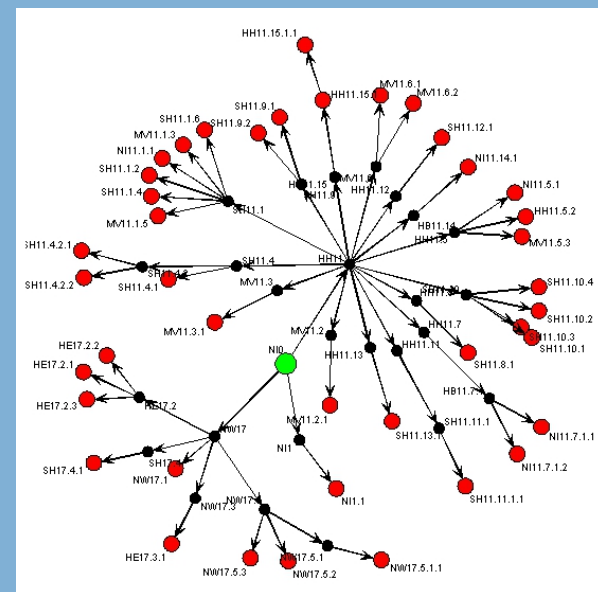
Results of the EHEC Task Force

Detailed food chain analysis (tracing) identifies sprouts as causative food

1. Detailed trace-back analysis for all salad ingredients used at five outbreak clusters
2. Trace-forward approach from the suspicious sprout producer in Lower Saxony

Results from human epidemiological studies at outbreak clusters in Germany and France show that only sprout consumption was associated with EHEC disease

Trace back of sprouting seeds in Europe identifies that one batch of contaminated fenugreek seeds caused both outbreaks





Report of the EHEC Outbreak Investigation

J. Verbr. Lebensm.
DOI 10.1007/s00003-011-0710-7

Journal für Verbraucherschutz und Lebensmittelsicherheit
Journal of Consumer Protection and Food Safety

LEITTHEMA: EHEC

Ergebnisbericht der Task Force EHEC zur Aufklärung des EHEC O104:H4 Krankheitsausbruchs in Deutschland

Die Task Force EHEC: • Helen Bernard • Martin Bisping • Bernd Broschewitz • Michael Bucher • Alexandra Fetsch • Doris Förster • Oliver Frandrup-Kuhr • Gerd Fricke • Matthias Greiner • Stefan Gross • Christoph-Michael Hänel • Katrin Heusler • Julia Jähne • Norbert Kenntner • Andreas Kliemant • Kristian Kühn • Manfred Kutzke • Wulf Ladehoff • Petra Luber • Olaf Mosbach-Schulz • Britta Müller • Albert Rampp • Annette Reinecke • Bettina Rosner

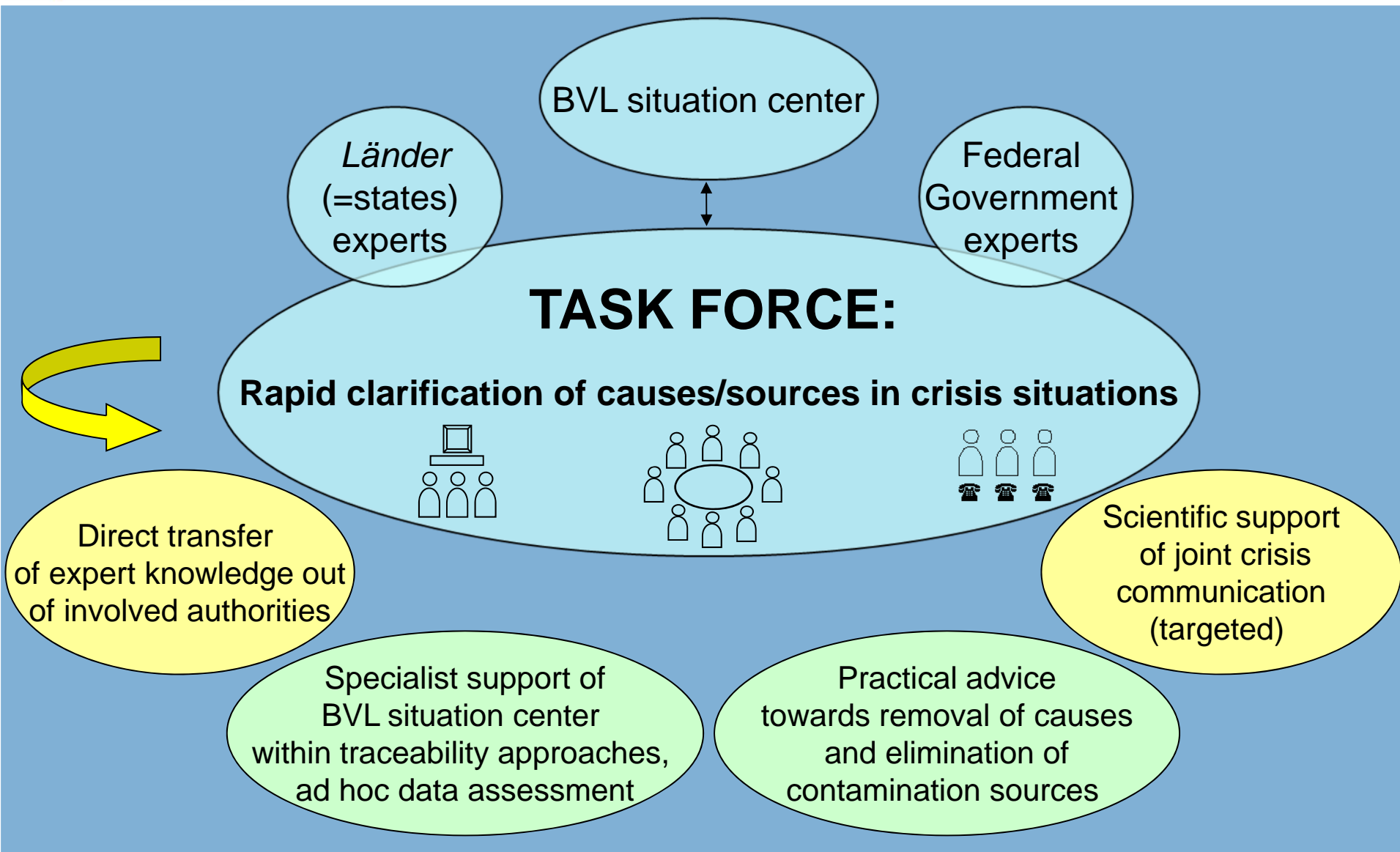
www.bvl.bund.de/taskforce_en

Permanent establishment of task force structures for the management of future food and feed safety crisis situations in Germany:

The Task Force for Food and Feed Safety

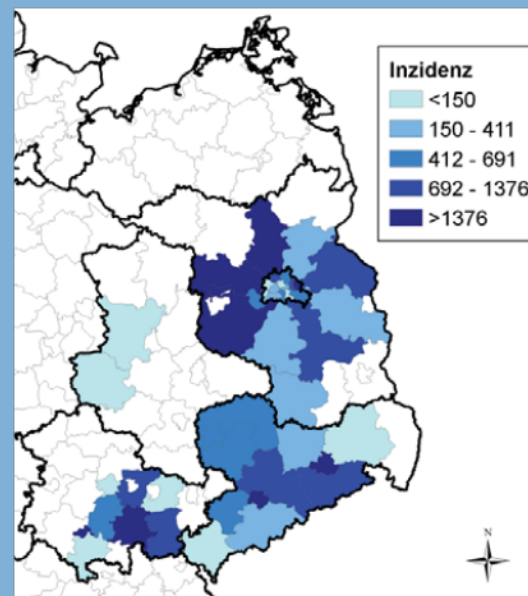
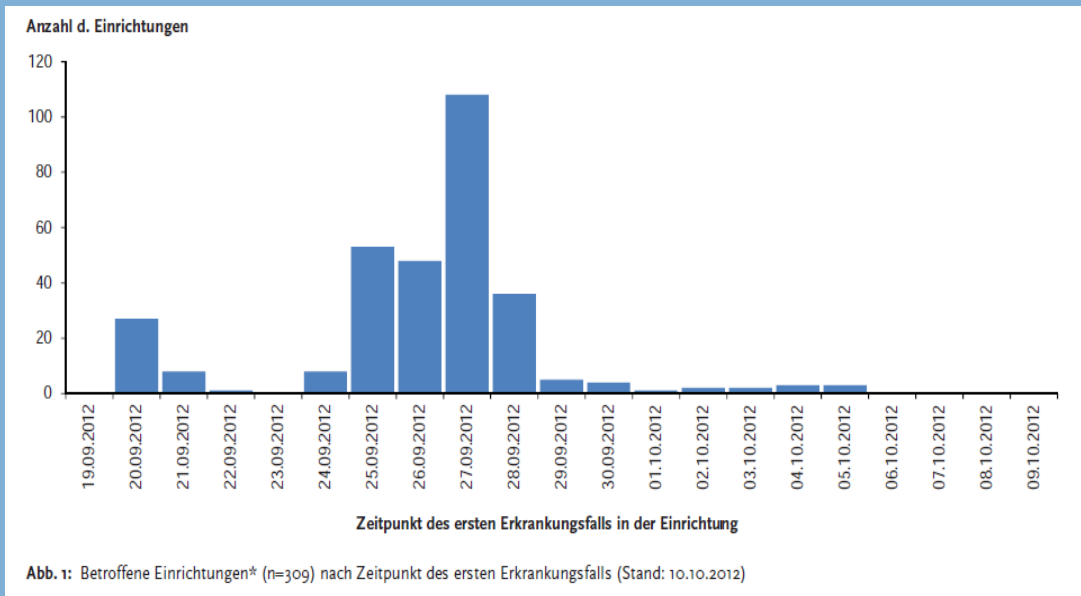
Bund and Länder took the decision to establish the task force at BVL on September 13th 2012, implementation is ongoing

Structure and Tasks of the TF Food & Feed Safety





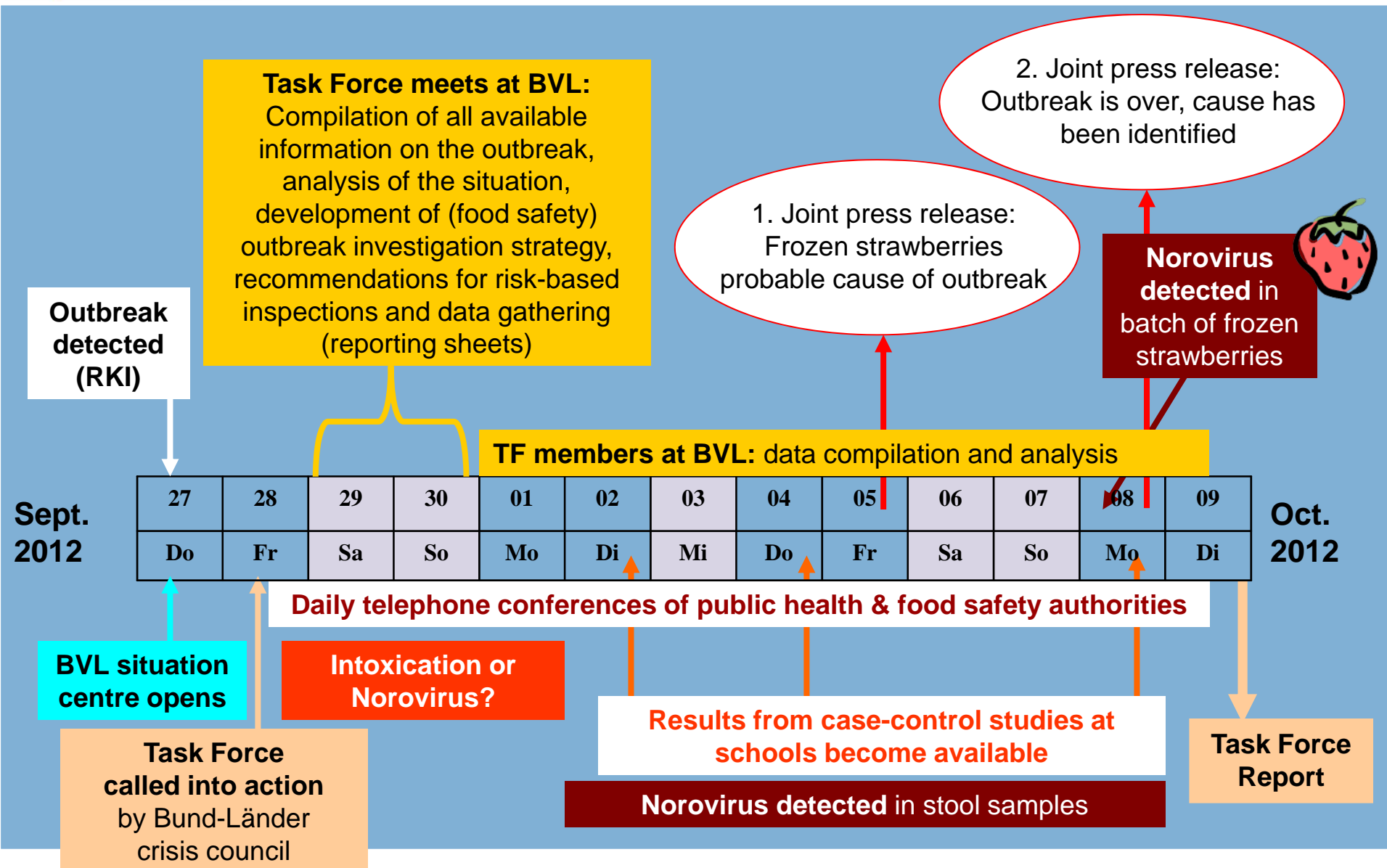
The 2012 Norovirus Outbreak in Germany



10.950 cases (38 cases hospitalised)
 in **five Federal States** in Eastern Germany:
 Berlin, Brandenburg, Saxony, Saxony-Anhalt, and Thuringia
390 establishments
15 regional kitchens (13 of the same catering company)
 Main outbreak event in **week 39** (September 24-28)

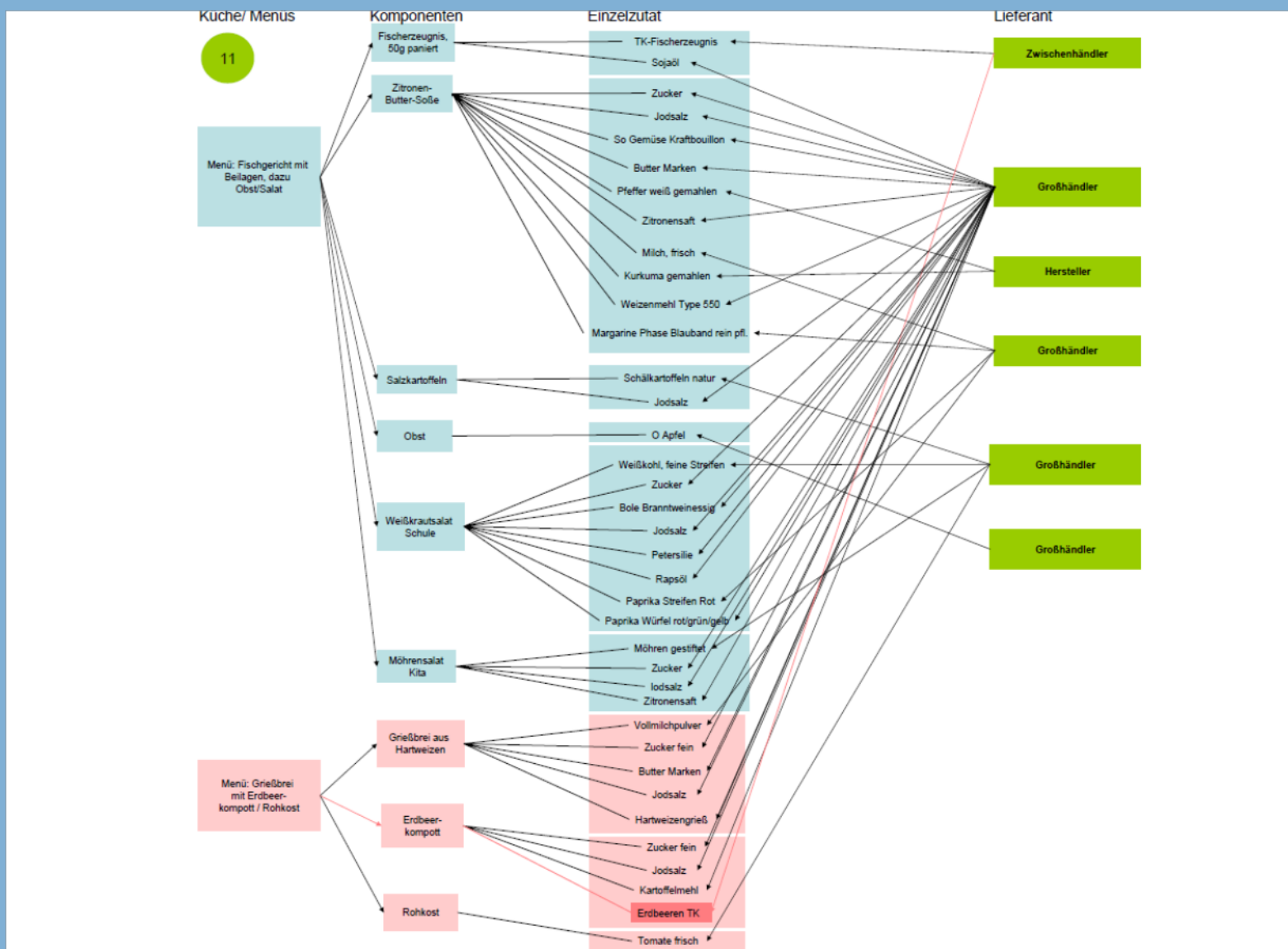
Source of graphics: *Epidemiologisches Bulletin* no 41/2012 (www.RKI.de)

Chronology of the Norovirus Outbreak Investigation





Example: Trace Back of Foods in Two Dishes





Norovirus Outbreak Clarification and Report

Analytical epidemiological evidence (November 14, 2012)

- Norovirus has been isolated from human cases and from a total of 7 packages of frozen strawberries (10 kg each) of the implicated batch
- Trace back analysis showed that outbreak related kitchens had received and used frozen strawberries of this batch
- Genotyping of virus RNA has shown identical sequences in cases and strawberries
- Four human case-control studies at schools with questions about food consumption revealed that cases with vomiting and diarrhoea showed a significant association with the consumption of strawberry dishes



Activity report by the Task Force in clarifying the outbreak of gastroenteritis

Following the outbreak of acute gastroenteritis in Eastern Germany, on 28 September, the federal government and the state governments decided to bundle investigative activities on the food side with a coordination group (Task Force). The work of the Task Force was managed and coordinated by the Federal Office of Consumer Protection and Food Safety (BVL). It included experts of the affected Federal States Berlin, Brandenburg, Saxony, Saxony-Anhalt, Thuringia and Hesse as well as of the BVL, the Federal Institute for Risk Assessment (BfR), and the Robert Koch Institute (RKI).

http://www.bvl.bund.de/EN/01_Food/06_Taskforce/02_Gastroenteritis/Gastroenteritis_node.html

Thank you for your attention!
Questions?

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