



Risk assessment implications and preparation for response to food fraud

Tobin Robinson, Head of Unit, Scientific Committee and
Emerging Risks

- EFSA's role in food safety
- Food fraud – definitions and examples
- Food fraud implications for EU risk assessment

What is EFSA's role?

To provide risk assessment advice on:

- food and feed safety,
- animal and plant health issues,
- animal welfare,
- nutrition, allergies

.....to Member States and the European Commission.

EFSA's tasks

1. Provide scientific advice, opinions, information, and technical support for Community legislation and policies
2. Collect and analyse data to allow characterisation and monitoring of risks
3. Promote and coordinate development of uniform risk assessment methodologies
4. Communicate risks related to all aspects of EFSA's mandate

What EFSA cannot do

- 
- Be responsible for food safety legislation
 - Take charge of food safety/quality controls, labelling or other such issues
 - Act as a substitute for national authorities

Types of food fraud (Spink 2007, 2009)

An intentional act for economic gain:

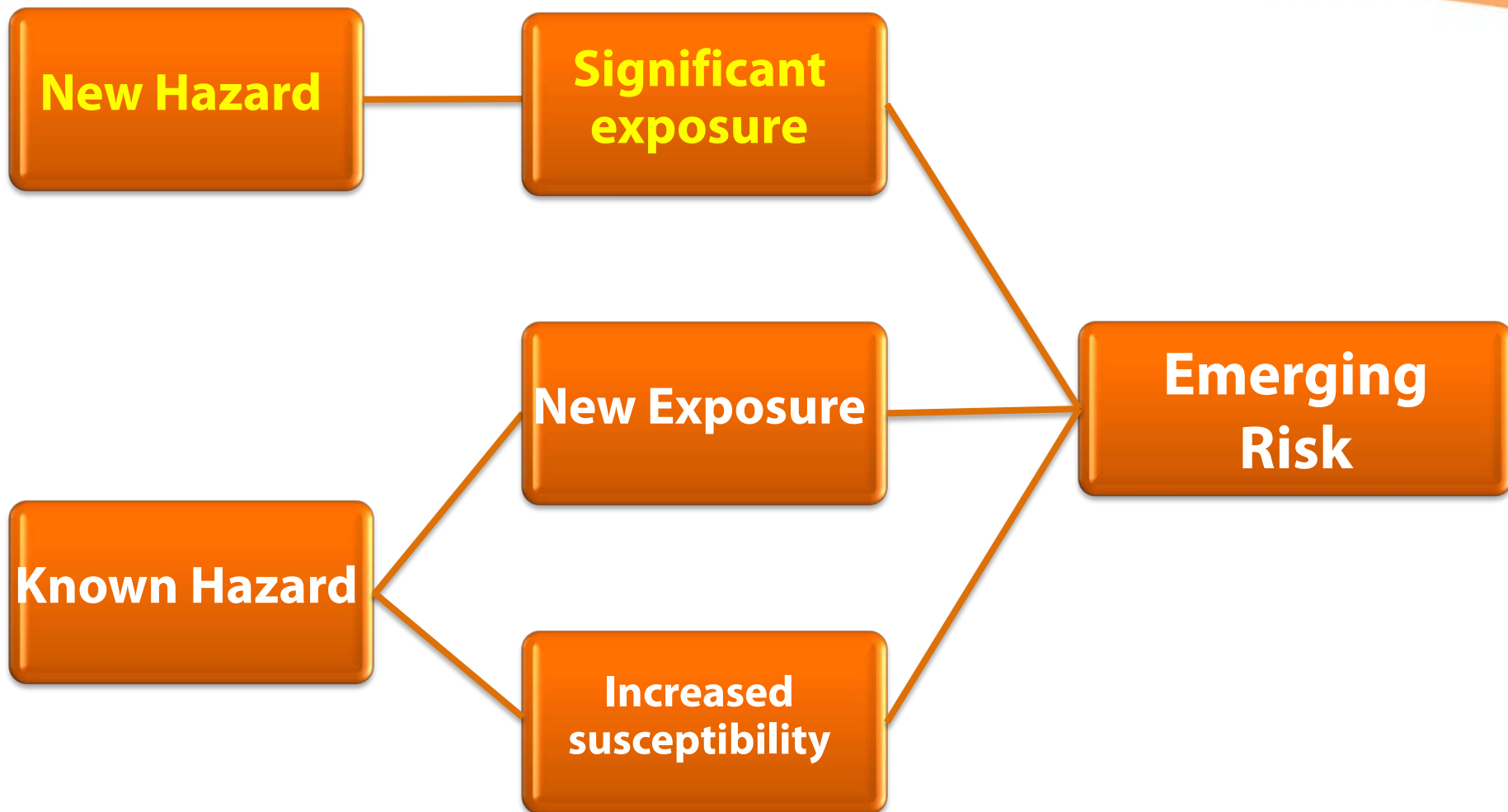
- **Adulteration** e.g. melamine in milk
- **Tampering** e.g. changed expiry date
- **Over-run** e.g. under-reporting of production
- **Theft** e.g. product distributed outside of regulated supply chain
- **Diversion** e.g. relief food redirected
- **Simulation** e.g. inexact copies of foods produced without the same food safety assurance
- **Counterfeit** e.g. product fully replicated but without the same food safety assurance

Food fraud and EFSA (risk assessment) ?

- Urgent risk assessments to support crisis/incident management.
- Anticipation of future risk assessment needs (emerging risks)

Substitution, adulteration, simulation

Definition of Emerging Risk



ESFA, 2007. Definition and description of « emerging risks » within the EFSA's mandate. Statement of the Scientific Committee, 10 July 2007.

Examples – substitution (simulation)

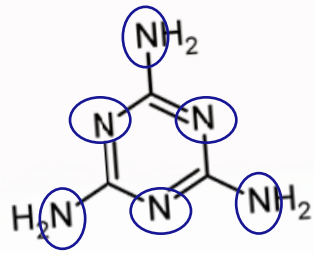
- Beef by horse meat
- Fish by less expensive species
- Lamb by other meats (chicken and pork)
- Donkey by horse meat

- Meat products with gross contamination (as well as with trace contamination) found in the food chain.
- Mis-labelling at a point in the food chain occurred.
- Risks ?
 - Lost traceability, lower safety assurance
 - Presence of a veterinary drug (phenylbutazone) not authorised for animals entering the foodchain required an urgent joint risk assessment by EFSA and EMA.

- Global consumption of fish is rising
- Testing has revealed significant mislabelling:
 - UK: 7% of cod and haddock sold in ‘fish and chip’ shops were substituted by cheaper types of fish.
 - Ireland: 19% of fish products were mislabelled.
 - USA: 25% of fish sold in restaurants in new York were ‘mis-labelled’
- Risks ?
 - Lost traceability, lower safety assurance

- Milk with melamine (falsifying protein content)
- Milk with leather proteins (falsifying protein content following dilution)
- Milk with clouding agents (correcting the visual appearance following dilution)

The case of Melamine



- approved as food contact material
(Directive 2002/72/EC)



- legally used in plastics, fabrics, glues, colorant for inks etc



- illegally used in feed & food

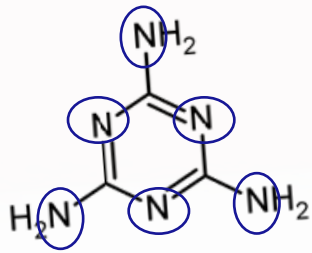


analytical tests measure higher protein content



£ € \$

The case of Melamine



- 2007: pet feed contaminated with melamine imported from China
 - ⇒ kidney failure, deaths in **dogs, cats**
- 2008: contaminated infant milk, milk products produced and consumed in China
 - ⇒ kidney failure, deaths in **children**
- EU: no imports of milk & milk products from China, but products containing milk (**biscuits, chocolate**) imported



Examples – counterfeiting/simulation

- Use of banned, unauthorised and counterfeit pesticides.
 - A trend identified by Europol in 2012.
 - According to European Crop Protection Association (ECPA) 7-10% of pesticides are thought to be illegal.
 - Sophisticated counterfeits (same packaging and labelling)
 - Low quality copies (different formulation, different labelling)
 - Illegal or unregistered products masquerading as legitimate
 - Illegal activity, including organised crime
 - Risk ? Banned pesticides often already assessed, new formulations, new ingredients however maybe unknown.
 - Poses a risk to consumers, crops and the environment

- Largely a risk management issue, however;
- Urgent risk assessments to support crisis/incident management.
- Anticipation of future risk assessment needs (emerging risks)



Thank you for your attention !

and

Make a difference to Europe's food safety

EFSA is seeking high-calibre experts to serve on its Scientific Committee and Scientific Panels.

- ❑ Candidates should have proven excellence in one or more of the scientific fields within the Authority's remit.
- ❑ Your work will be visible to the scientific community through the *EFSA Journal*, indexed in several key bibliographic databases.
- ❑ Selection is carried out through an open, transparent procedure.
- ❑ Successful applicants will be appointed for a three-year term starting in July 2015.
- ❑ Apply online **from 9 April to 18 June 2014** at:

www.efsa.europa.eu