



Food
Standards
Agency
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The identification of future food risks

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FSA Strategy for 2010-2015



- *Outcome One: foods produced or sold in the UK are safe to eat*
- *Outcome Two: imported food is safe to eat*

Main Priority

*“increase horizon scanning and improve forensic knowledge, and intelligence on, global food chains to identify and reduce the impact of potential **new and re-emerging risks** – particularly around chemical contamination”*

Emerging Risk – Definition

- **a known hazard or threat which is increasing in frequency of occurrence or severity or,**
- **a new and unexpected hazard or threat**

The Detection of Emerging Risks: Considerations

What is typical?

(a baseline)

What is exceptional?

(identify unusual or abnormal events)

How do we prevent recurrence?

(determine root causes)

What don't we know?

(analyse our global food chains)

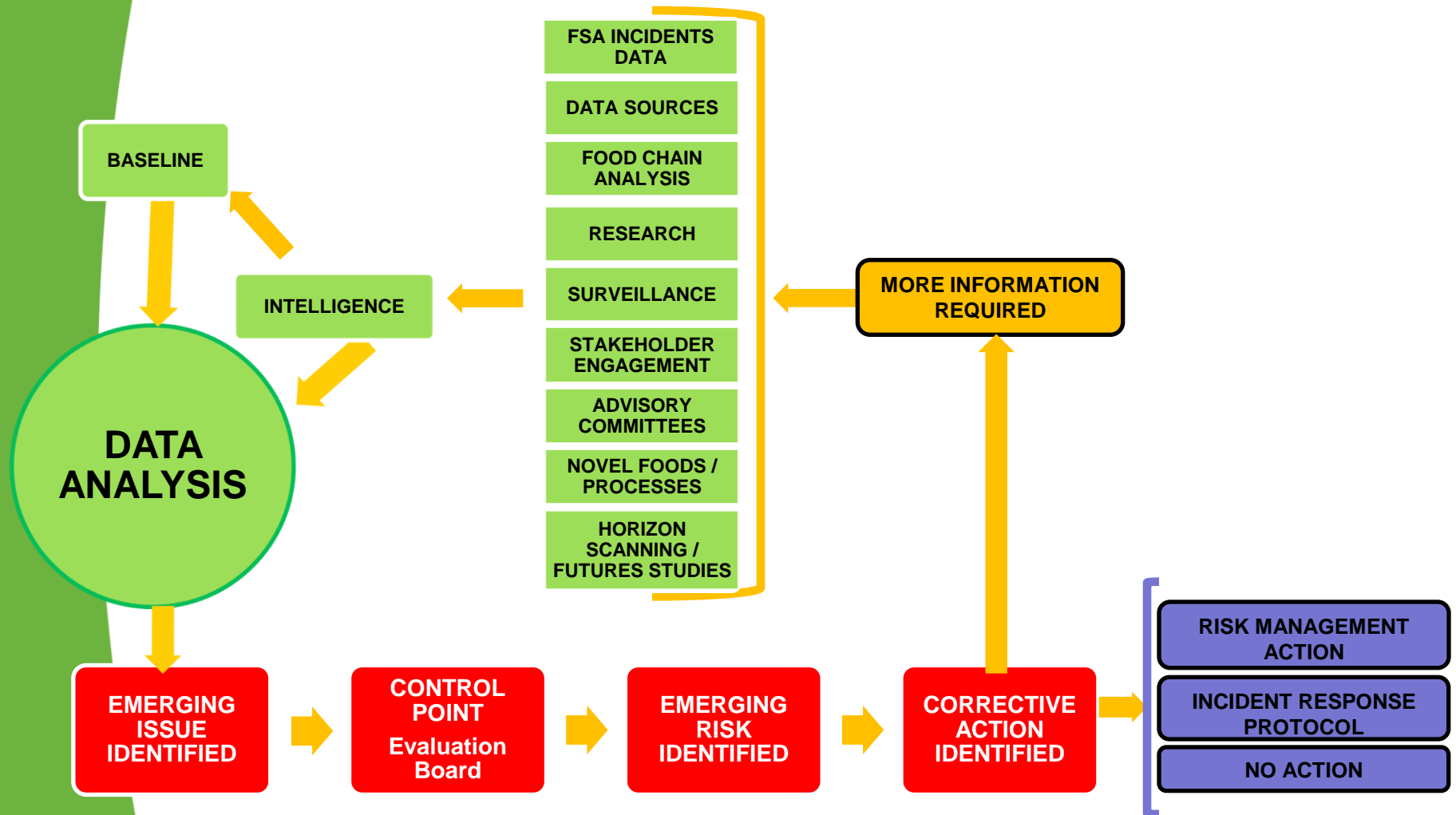
Successful detection of Emerging Risks requires...

A protocol
(framework)

An Intelligence Strategy
(where & how to look)

Skilled human intervention
(know how & common sense)

The detection of emerging risks



Programme Outputs

- Early warning system for new and re-emerging risks
- Intelligence-led sampling plans supporting enforcement activities
- Targeted research and surveillance activities to fill gaps in our food safety knowledge
- Support to policy making in the UK and across the EU

An understanding of when, why and how incidents occur to enable effective interventions to prevent future food safety issues

What is Typical?

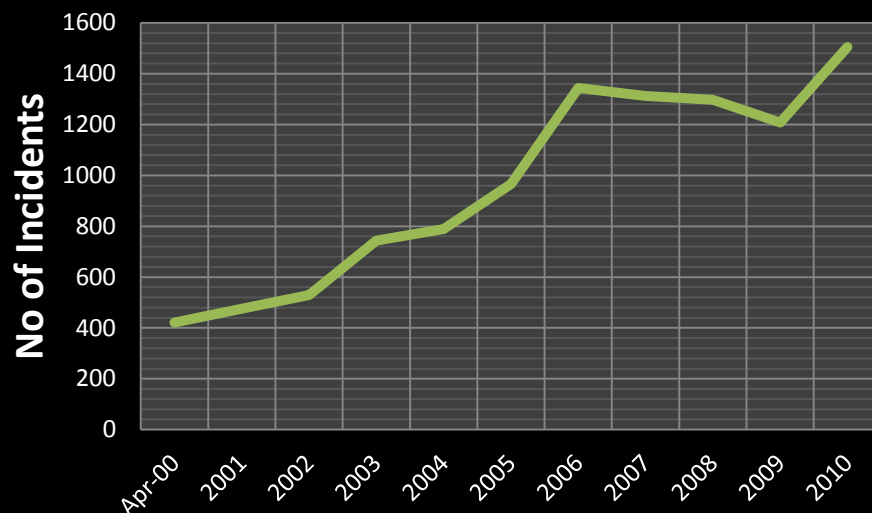
Food Safety Incidents 2010

In 2010 the FSA....

- Investigated 1,505 incidents
- Issued 70 food safety alerts

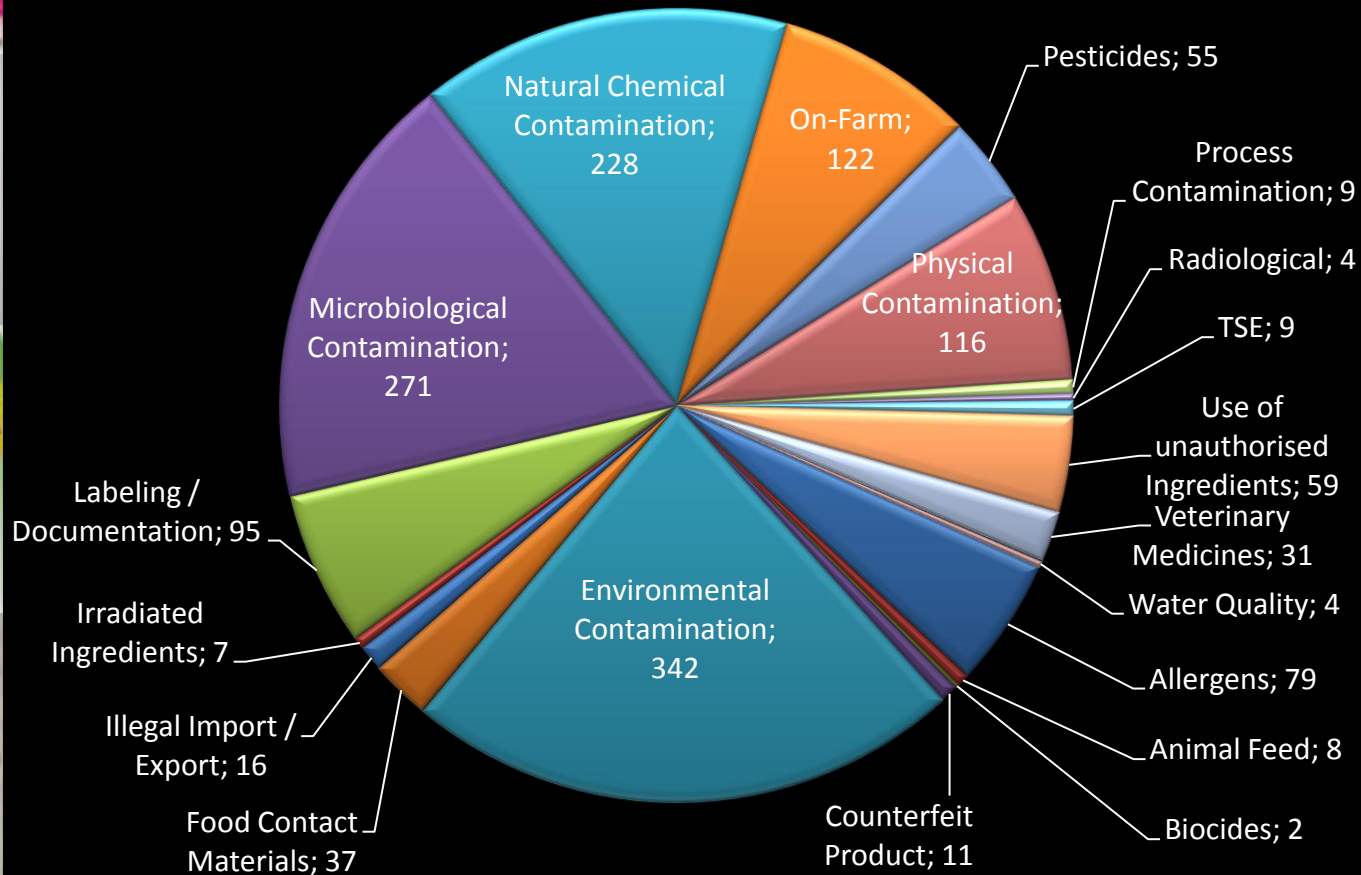


Recorded Incidents 2000/10

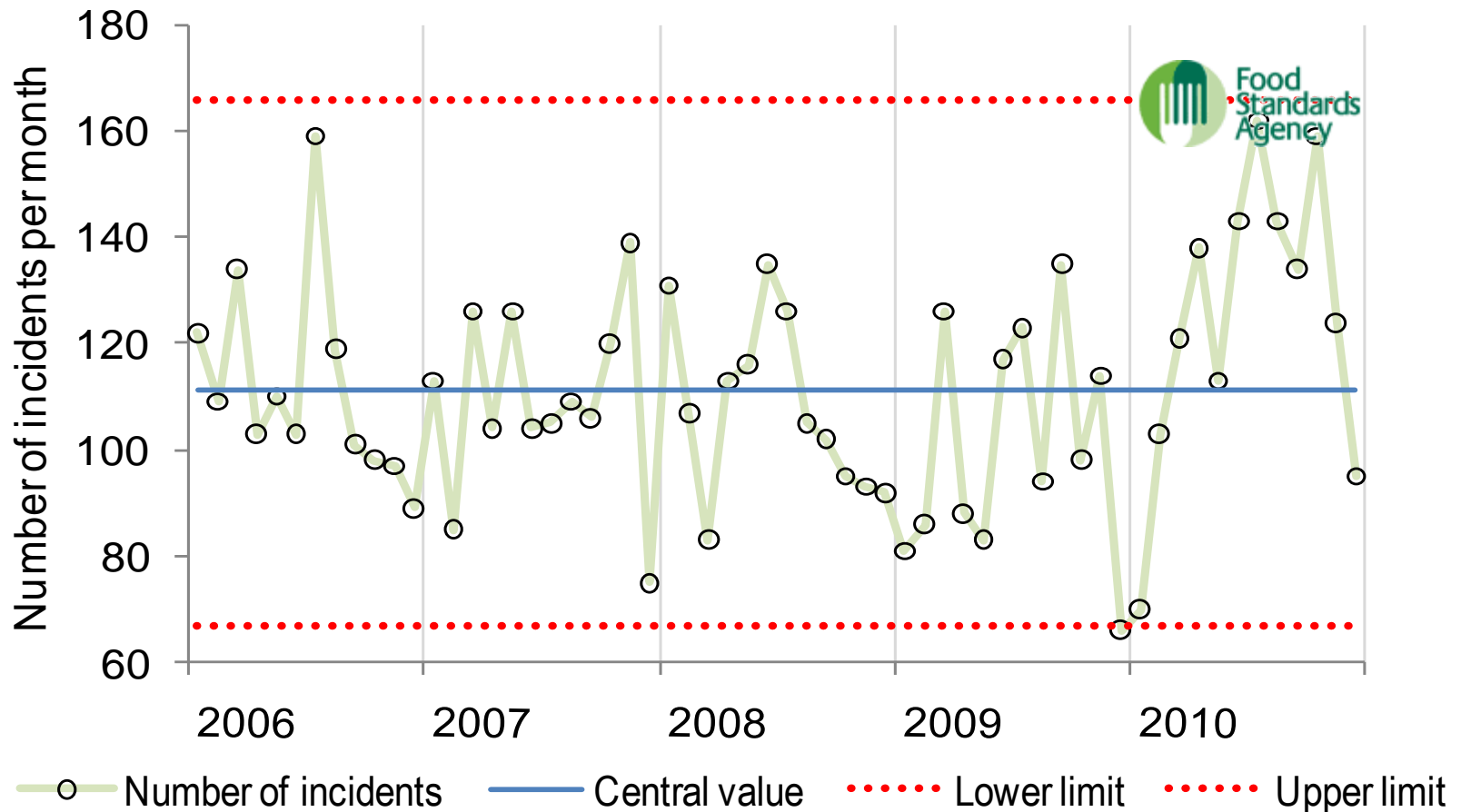


“An incident is.....
any event where, based on the
information available, there are concerns
about actual or suspected threats to the
safety or quality of food that could require
intervention to protect consumers’
interests.”

Food Safety Incidents reported to the FSA during 2010 by Main Category

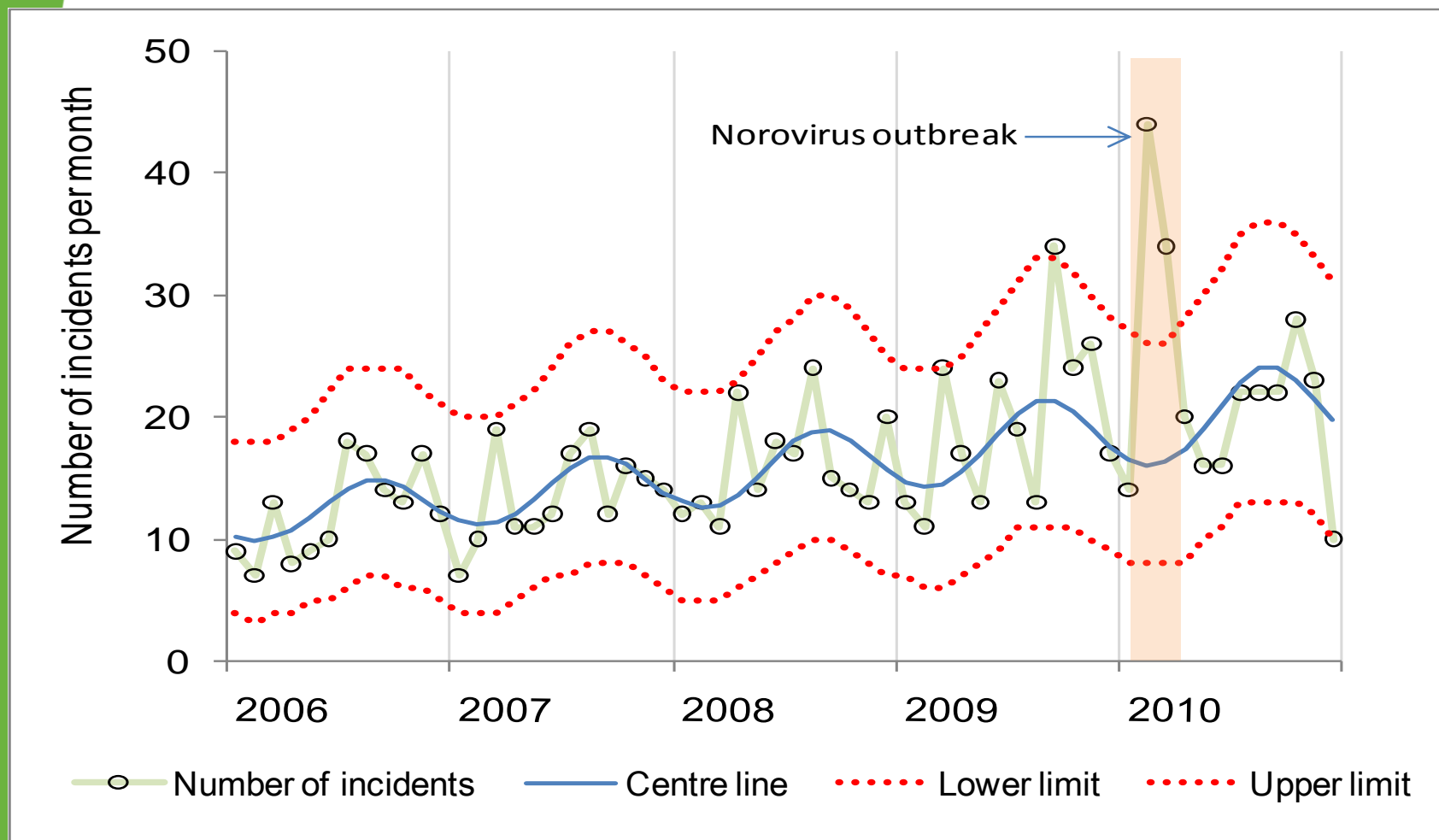


Control chart for total incidents



What is Exceptional?

Control chart for microbiological incidents



How do we prevent recurrence?

Root Cause Analysis

- Detailed analysis shows that certain types of incident seem to regularly reoccur
- This suggests that not all corrective actions taken are sustainable or appropriate and are therefore not providing a long-term solution
- If, as the result of an investigation, generalised recommendations such as...

“...remind the operator to be alert at all times...”

...are made, then it is probable that the basic causes of the incident have not been identified.

Why? Why? Why? Why? Why?

- RCA identifies a step or series of steps in a chain of events where action can be taken that will change procedure or behaviour thereby preventing a potential food safety incident
- By repeatedly asking “**Why?**”, the chain of events leading up to an incident can be identified
- Focusing preventative measures at the weaknesses identified, minimises the potential for recurrence

What don't we know?

Global Chain Analysis

RISK	DRIVER	CONTROL POINT	ANALYSIS METHOD	WHERE TO LOOK IN CHAIN?
Unintended Food Contamination	Accidental: Error or failure to identify hazard	Hazard Point	HACCP	Points associated with biological, chemical or physical hazards
Deliberate Food Contamination (Direct)	Malicious: Personal or ideological gain	Threat Point	TACCP	Points where there is opportunity for covert human intervention
Indirect Food Contamination (Indirect)	Intended: Financial or personal gain	Value Point	VCA (Value Chain Analysis)	Points associated with large changes in perceived value

Example Template		Risk to Consumer		
		Hazard Point Unintended Food Contamination	Threat Point Deliberate Food Contamination (Direct)	Value Point Indirect Food Contamination

Process Stage	Growing	Risk of chemical contamination by residues of veterinary medicines		Risk of chemical contamination from the use of unauthorised residues of veterinary medicines
	Harvesting			
	Freezing			
	Storing		Risk of addition of (?) to product in open store	
	Transport			
	Ingredients Purchasing			Risk of species substitution leading to potential hygiene issues
	Defrosting			
	1° Processing		Risk of addition of (?) to open cooking vessel	
	Cooking	Risk of microbiological contamination due to insufficient cooking		
	Purchasing (Consumer)			Risk of species substitution leading to potential hygiene issues

	Severity	X	Likelihood	
1	Not very severe		Remote	Risk Remote (1 -3)
2	Legal or minor injury		Potential	Risk Managed (4-6)
3	Illness		Probable	Uncontrolled Risk (7-9)

Emerging Risks Consultative Forum (ERCF)

Expert Consultation Group representing UK Industry & Enforcement on matters of potential emerging food safety risks

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Discussion forum for the two-way
information to inform the emerging

Emerging Risks Exchange Network (EREN)

Principal Objectives

- EREN is the principal body for exchanging information on ER's between EFSA, MS's, EU Commission and international organisations
- Network consists of national experts on ER identification
- Exchange of information will include ER intelligence and the identification activities of MS's
- Facilitate the access to and exchange of relevant databases

Centre for Environmental Risks and Futures (CERF)

The use of futures research methods (including horizon scanning, trend research and scenario planning) to identify, analyse and communicate insights about the future with the objective of anticipating new risks and opportunities.

Target CERF outputs to provide intelligence relating to the weaknesses identified by GCA thereby driving preventative and mitigating actions




In conclusion...

“There are known knowns; there are things we know we know.

We also know there are known unknowns; that is to say we know there are some things we do not know.

But there are also unknown unknowns – there are things we do not know we don't know”.....

United States Secretary of Defence
Donald Rumsfeld (2002)

- 
- All these techniques identify the world of food safety as we know it complete with flaws

- They give us a better understanding of why things happen and a picture of the “*known knowns*” and the “*known unknowns*”

- Horizon scanning and futures studies paint a picture of the world we haven't yet realised and how the pattern of “*known knowns*” might change as a result

- Global Chain Analysis combines these approaches enabling us to map weaknesses and identify gaps in the picture thereby potentially revealing “*unknown unknowns*”

- This complementary approach gives us the potential to identify and respond more quickly to food safety issues thereby creating...

Safer Food for the Nation



Thank You

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