

ADVISORY COMMITTEE ON ANIMAL FEEDINGSTUFFS

57th Meeting of ACAF on 7 March 2012

Presentation Paper: Emerging Risks

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Emerging Risks Programme Update

Philip Randles

Advisory Committee on Animal Feedingstuffs 7th March 2012

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”

The Food Standards Agency's
Strategy to 2015

Safer food for the nation

March 2011 update



Emerging Food Safety Risks

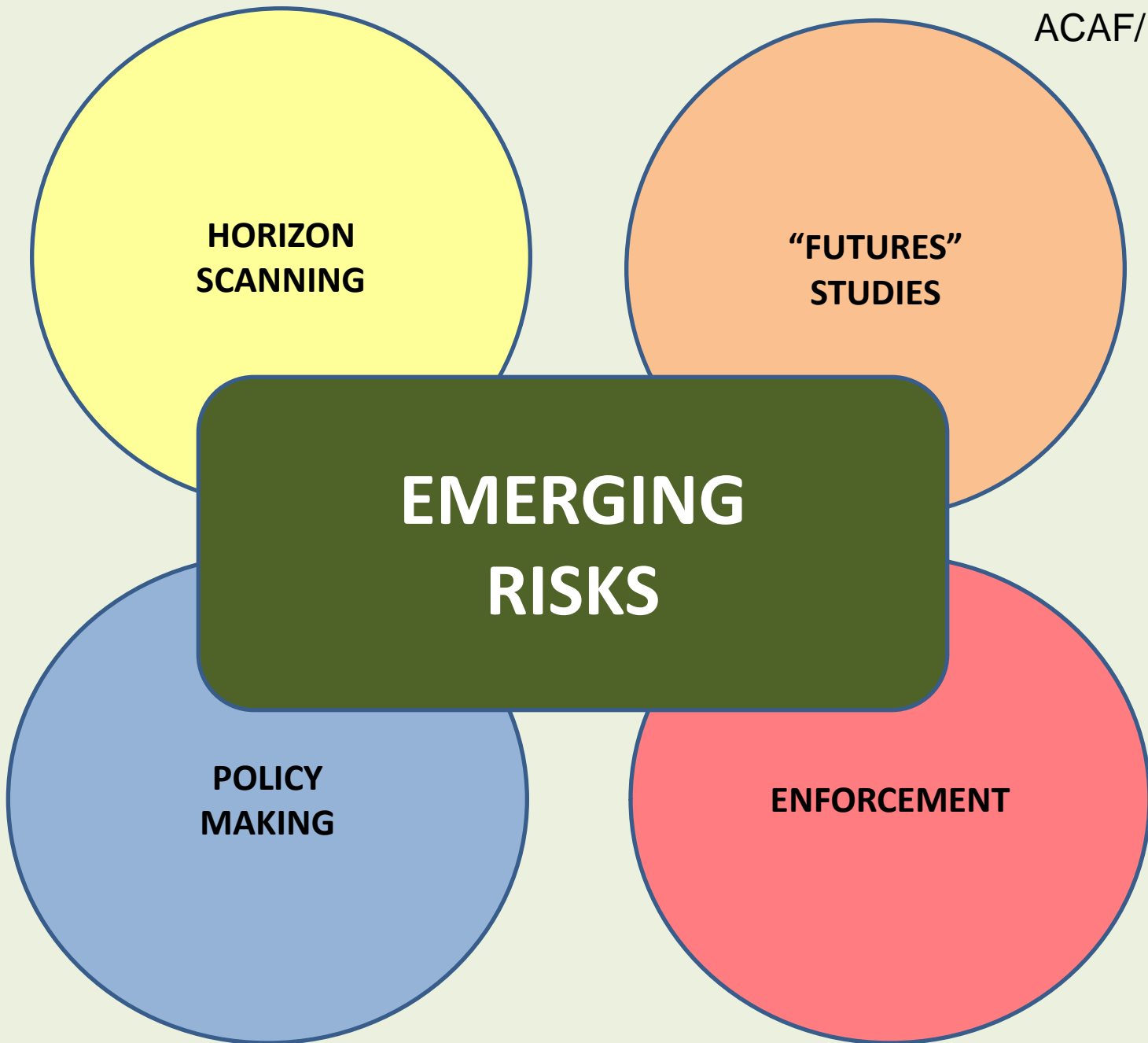
In this context an emerging food safety risk is understood as a health risk to consumers resulting from....

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

Further Reading:

The Identification of Future Food Risks, Food Standards Agency (2011),

<http://www.food.gov.uk/multimedia/pdfs/board/fsa110109.pdf>



The Detection of Emerging Risks: Considerations

What is typical?

Identify and characterise the current status of food safety within our food chains thereby producing **A BASELINE**

What is exceptional?

Use available intelligence to monitor movements against this baseline to **IDENTIFY UNUSUAL OR ABNORMAL EVENTS**

How do we prevent recurrence?

DETERMINE ROOT CAUSES of reoccurring issues so that we can focus corrective actions on specific weaknesses

What don't we know?

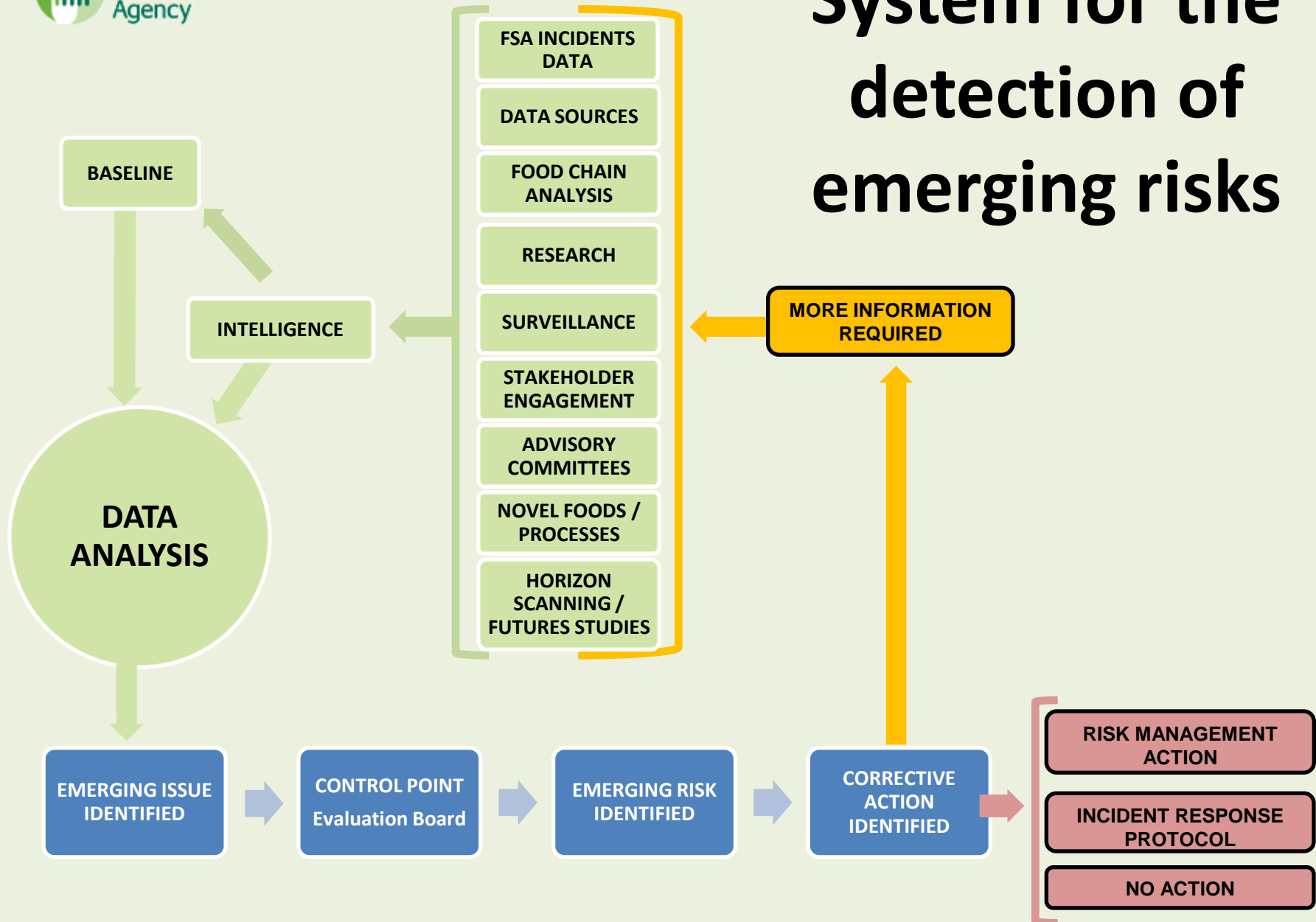
ANALYSE OUR GLOBAL FOOD CHAINS to identify potential weaknesses which could lead to the development of future new, unrecognised hazards and threats, including the impact of global Drivers eg Climate Change

System for Detecting Emerging Risks

Successful detection requires:-

- **A protocol (framework)**
- **An Intelligence Strategy (where & how to look)**
- **Skilled human intervention
(know how & common sense)**

System for the detection of emerging risks



Memex Patriarch

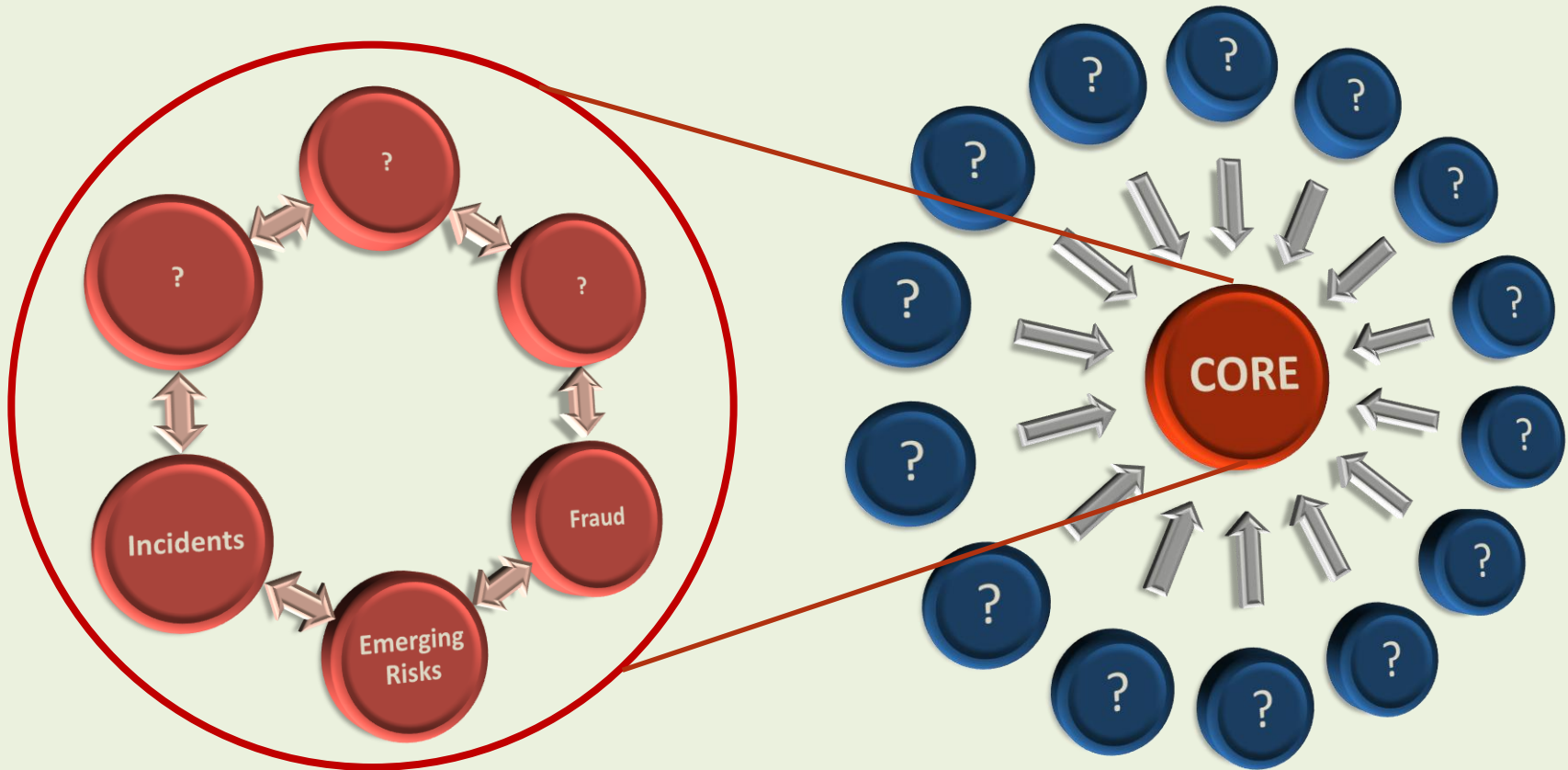
- Based upon the National Intelligence Model
- “Data repository” for storing data & intelligence with differing sources and formats including free text
- Performs very complex manual and automatic search enquiries
- “Linkage charts” showing relationships between items of intelligence
- Facilitates credibility and simple risk assessment of intelligence

What can't Memex do by itself?

- Find emerging risks
- Identify sources of data and intelligence
- Risk assess or evaluate items of data
- Risk assess or evaluate potential emerging issues
- Use “common sense” to interpret intelligence
- Identify legal and data protection issues

Memex patriarch is simply a tool which if used correctly will help collate and analyse available data and intelligence

Data Sources



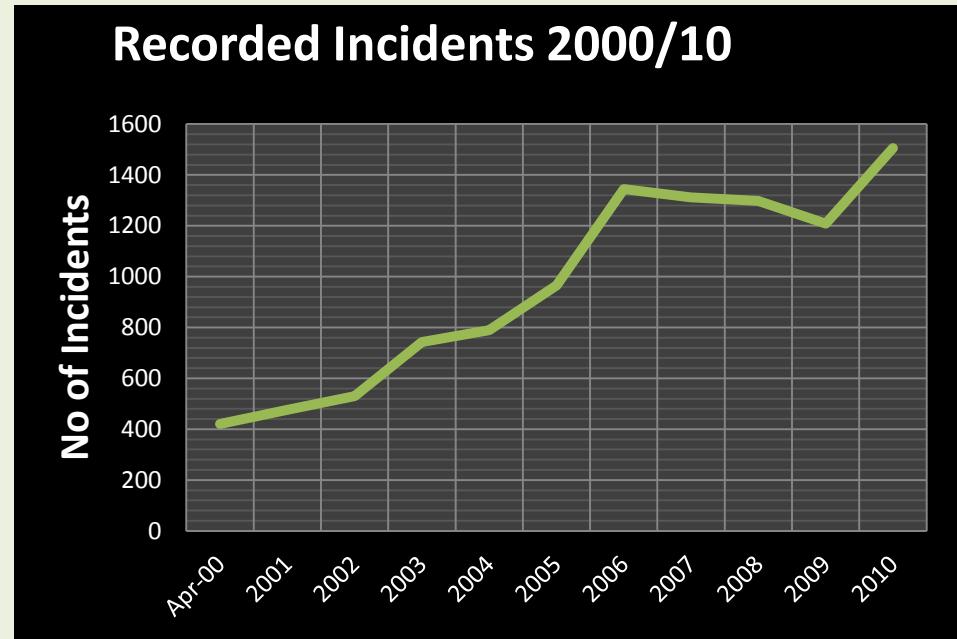


What is Typical?

Food Safety Incidents 2010

In 2010 the FSA....

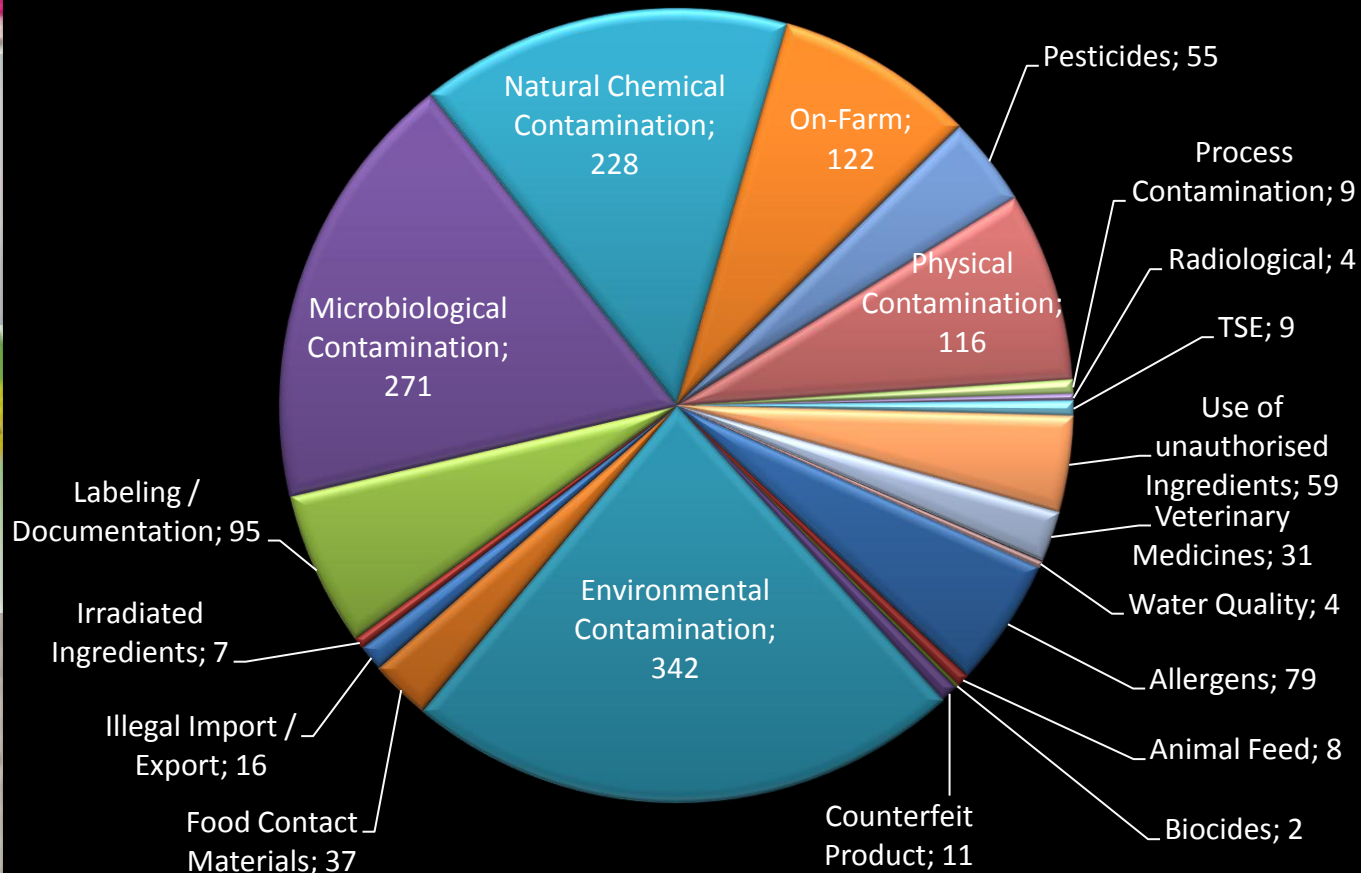
- Investigated 1,505 incidents
- Issued 70 food safety alerts



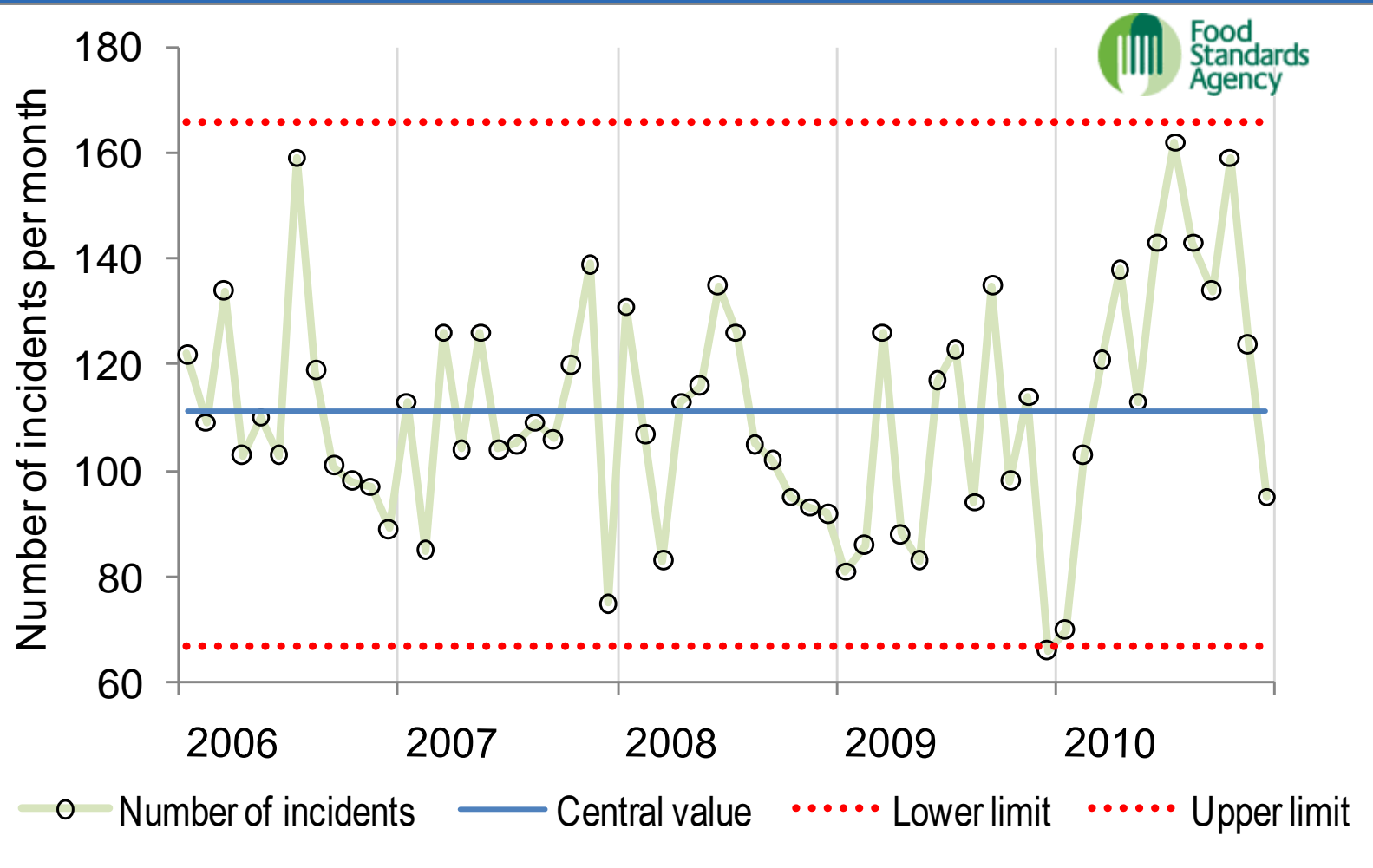
“An incident is.....

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



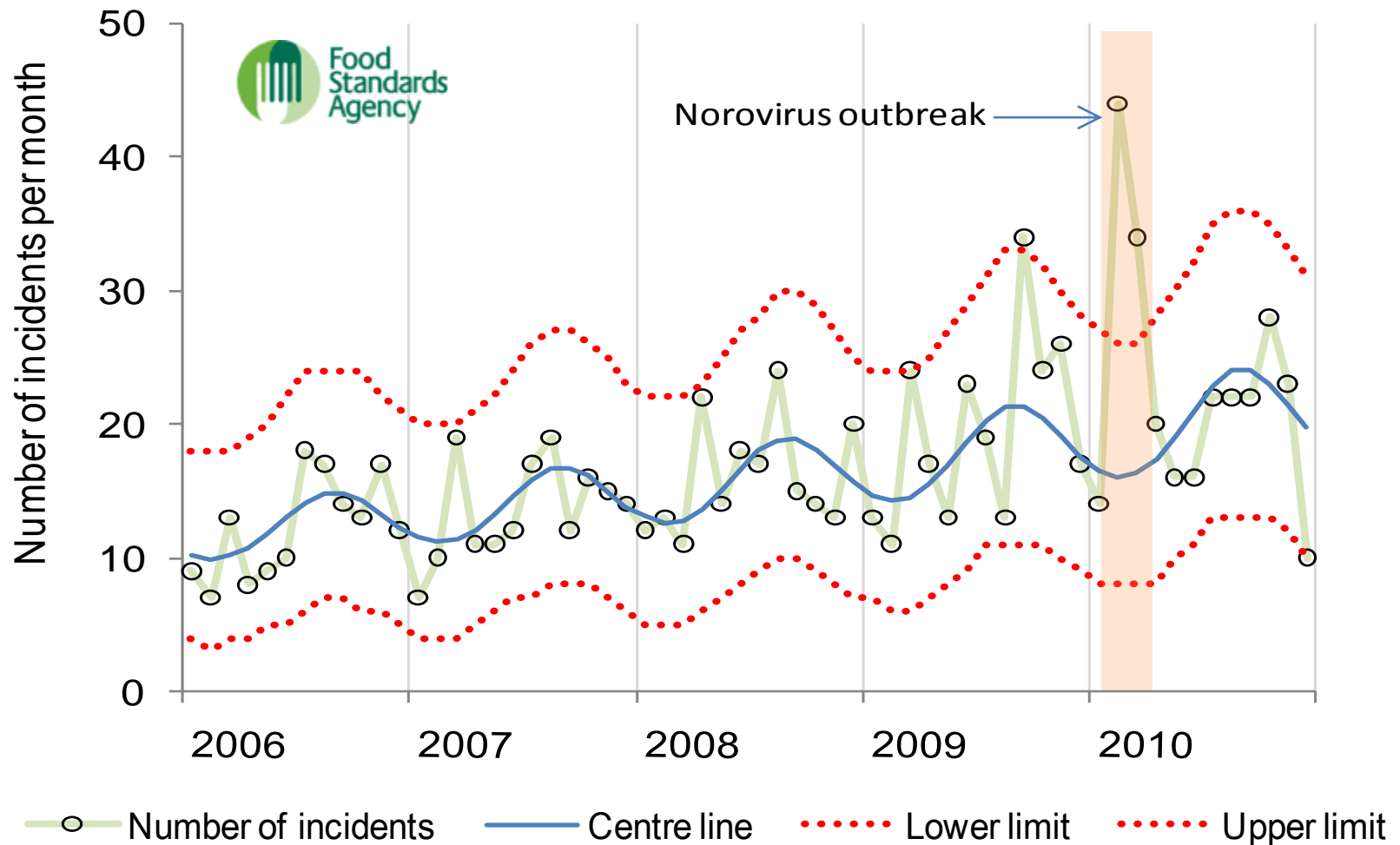
The number of total incidents per month, 2006 to 2010, with control limits





What is Exceptional?

The number of microbiological incidents per month, 2006 to 2010, with control limits





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
- How can Root Cause Analysis help?

Why? Why? Why? Why? Why?

- Root Cause Analysis 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 chain of events, minimises the potential for recurrence
- Root Cause Analysis offers long-term solutions to prevent food incidents from recurring



What don't we know?



Emerging Risks Consultative Forum (ERCF)

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

Principal Purpose:

To provide a discussion forum for the two-way exchange of
information to inform the emerging risks programme

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

Global Chain Analysis

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 mycotoxins		
	Harvesting			
	Storing		Risk of addition of (?) to product in open store	Risk of Ingredients substitution
	Transport			
	Ingredients Purchasing			Risk of ingredient modification / incorporation of additives to increase perceived value
	1° Processing			
	Cooking / cooling	Risk of microbiological contamination due to insufficient cooking	Risk of addition of (?) to open cooking vessel	
	Packing			
	Distribution			

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.

- How can CERF outputs be used to identify signals to trigger the emerging risks process?
- How can CERF outputs be used to identify which global chains require priority investigation?

In summary, the Emerging Risks programme is....

- Providing an intelligence-led approach to sampling plans for local and port authorities thereby supporting enforcement activities
- Identifying and monitoring weaknesses in our food chains providing early warning systems for new and re-emerging risks
- Identifying science based research and surveillance activities which will fill gaps in our food safety knowledge
- Supporting policy making in the UK and across the EU
- Building a clear picture of when, why and how incidents occur to enable the development of effective interventions to prevent future incidents



Thank You

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