



***Listeria monocytogenes* in food and animals in the European Union in 2008**

**MariaTeresa da Silva Felício
Zoonoses Data Collection Unit**

**ISOPOL XVII, International Symposium On Problems of Listeriosis
Alfândega Congress Center, Porto, Portugal , 5-8 May 2010**

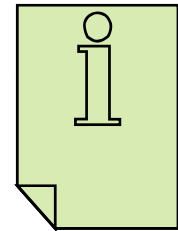
- 1. Introduction to EFSA**
- 2. Zoonoses Data Collection**
- 3. Community Summary Reports (CSR) structure**
- 4. Results for *L. monocytogenes* from 2008 CSR**
- 5. Conclusions**



- Set up in 2002 and is based in Parma, Italy
- Cooperation with ca. 1,500 external experts
- ca. 410 staff
- To date, around 2,000 scientific outputs adopted
- EFSA advises but not part of European Commission, **Risk assessment** separated from **risk management**
- EFSA closely co-operates with national authorities and actively considers and meets stakeholder needs

EFSA's tasks

1. Provide **independent scientific advice** and **support** for Community legislation and policies in all fields that impact **food and feed safety**
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



- The **EFSA Zoonoses Unit** runs the annual collection and analyses of data for **food, feed and animals** on:
 - Zoonoses,
 - Antimicrobial resistance,
 - Microbiological contaminants and
 - Food-borne outbreaks
- Data is submitted **to EFSA** by the Member States and other reporting countries in accordance with **Directive 2003/99/EC** on the monitoring of zoonoses and zoonotic agents
- EFSA took over this task in **2005**
- Member States have an obligation to report each year

- According to the Directive, the data collection is **mandatory** for **8 zoonoses**:
 - *Salmonella* (+ antimicrobial resistance)
 - *Campylobacter* (+ antimicrobial resistance)
 - ***Listeria monocytogenes***
 - *Brucella*
 - Tuberculosis due to *Mycobacterium bovis*
 - Verotoxigenic *Escherichia coli*
 - *Trichinella*
 - *Echinococcus*

And also for foodborne outbreaks

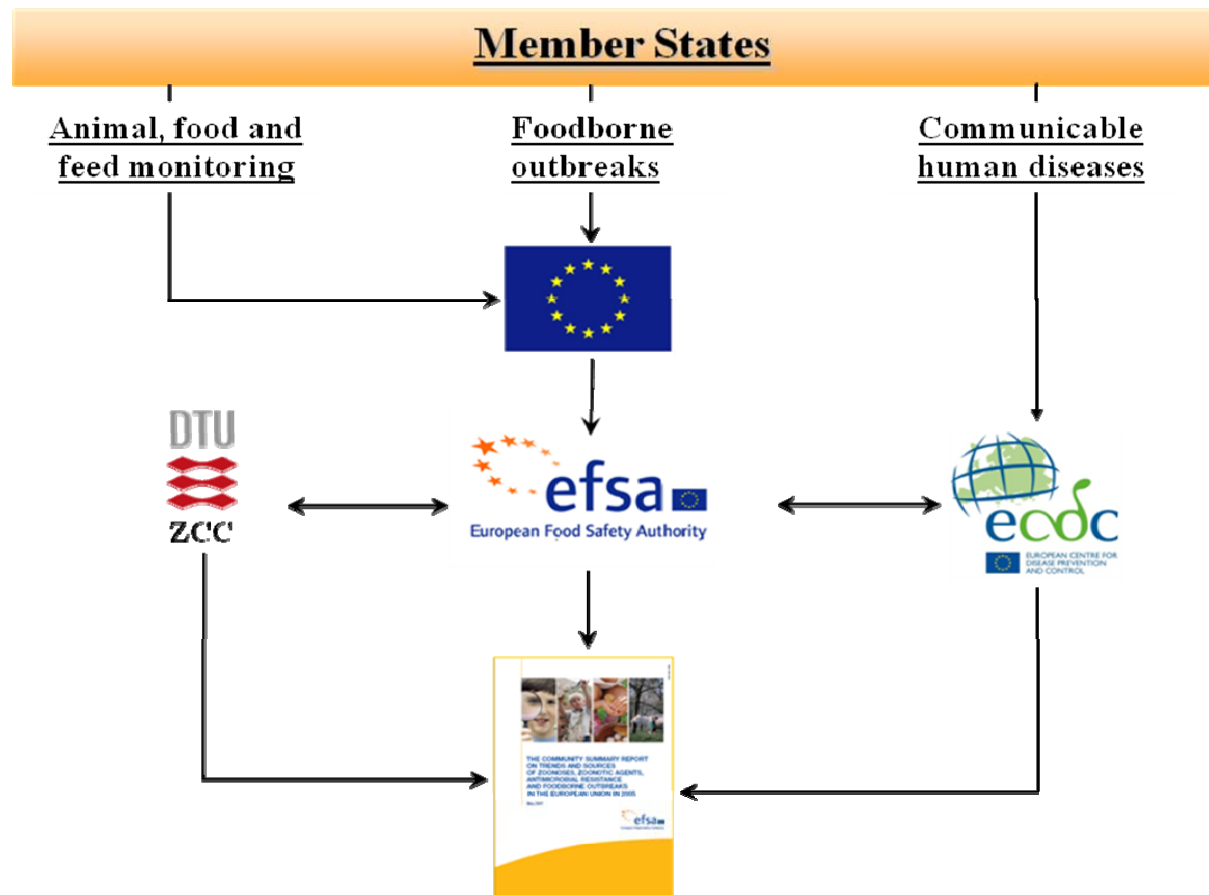
Data collection at MS level

National reporting officer coordinates the data collection from several national/regional institutions



Scheme of data flow for CSRs

EFSA web application and manuals provide the **format of the reporting**



Note: Human data is collected by ECDC through The European Surveillance System (TESSy)

Community Summary Reports

- As outcome, an **annual Community Summary Report (CSR)** is prepared in collaboration with **ZCC** (Zoonosis Collaboration Center = National Food Institute of Denmark, DTU)
- **ECDC** provides for and analyses the data on **human zoonoses cases**
- The Community Summary Report 2008 is published on the EFSA website (<http://www.efsa.europa.eu/en/scdocs/doc/1496.pdf>) and will also be published in printed copies

Community Summary Report

Trends and Sources of Zoonoses and Zoonotic Agents in the European Union in 2007



January 2009



Zoonoses Web Reporting Tool

- Web Interface: <https://zoonoses.efsa.europa.eu/zoonoses/>
- **Reporting Period:** from 1 April to 31 May
- Preparation of the Annual Report
 - Data Collection *April – May*
 - Data Validation *June*
 - Data Analysis *July – August*
 - Draft Annual Report *September*
 - Consultation *October*
 - Final Annual Report *November – December*
 - Publication *January*

Zoonoses Data Collection

Welcome. Please, log in to your account.

Username
Password

- The 2008 CSR was split in two separate reports:

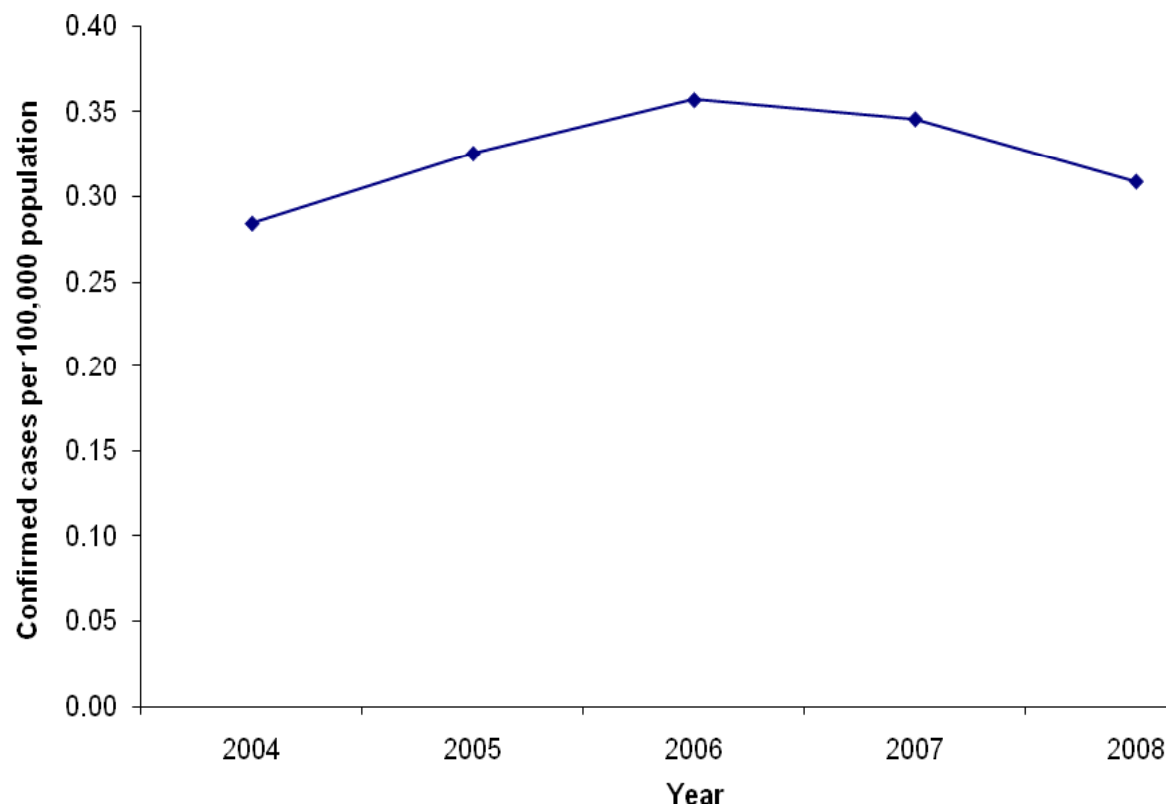
a) Trends and Sources of Zoonoses, Zoonotic Agents and food-borne outbreaks in the EU

Publication on the EFSA's website: 28 January 2010

b) Antimicrobial Resistance in the EU

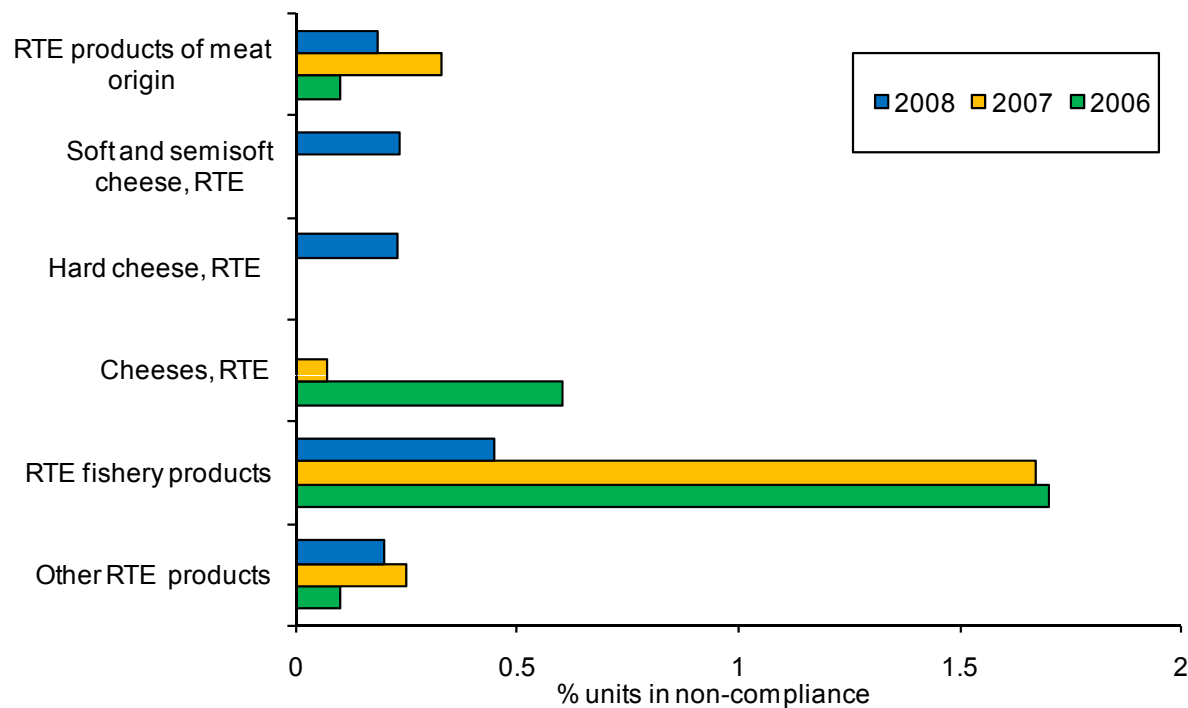
Publication foreseen by: May 2010

Listeriosis in humans, EU, 2008



- The number of **listeriosis** cases in humans decreased by 11.1%, compared to 2007, with **1,381** confirmed cases recorded in 2008 – however, in several MSs, reported listeriosis cases have increased consecutively over the past five years.

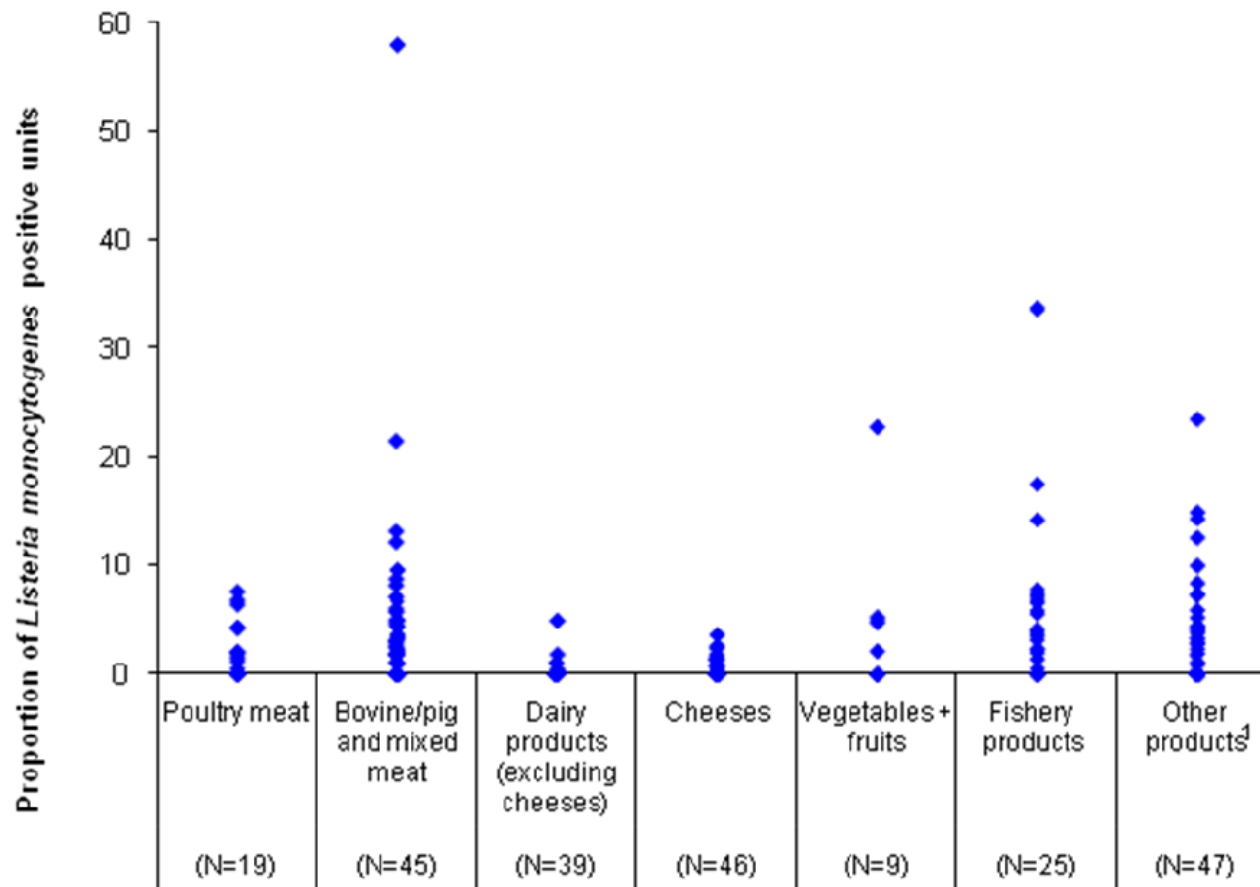
L. monocytogenes in ready-to-eat foods, at retail, single samples, in EU, 2008



Proportions of non-compliance (Com. Reg (EC) 2073/2005) in single samples of RTE foods, at retail, in 2008 compared to 2007 and 2006:

- **RTE fishery products:** decrease → might be influenced by differences in the countries reporting in each year
- **Cheeses:** more non-compliance than 2007 but less than 2006
- **RTE meat products:** results more in line with two previous years

Proportion of *L. monocytogenes* positive samples by RTE food category, 2008



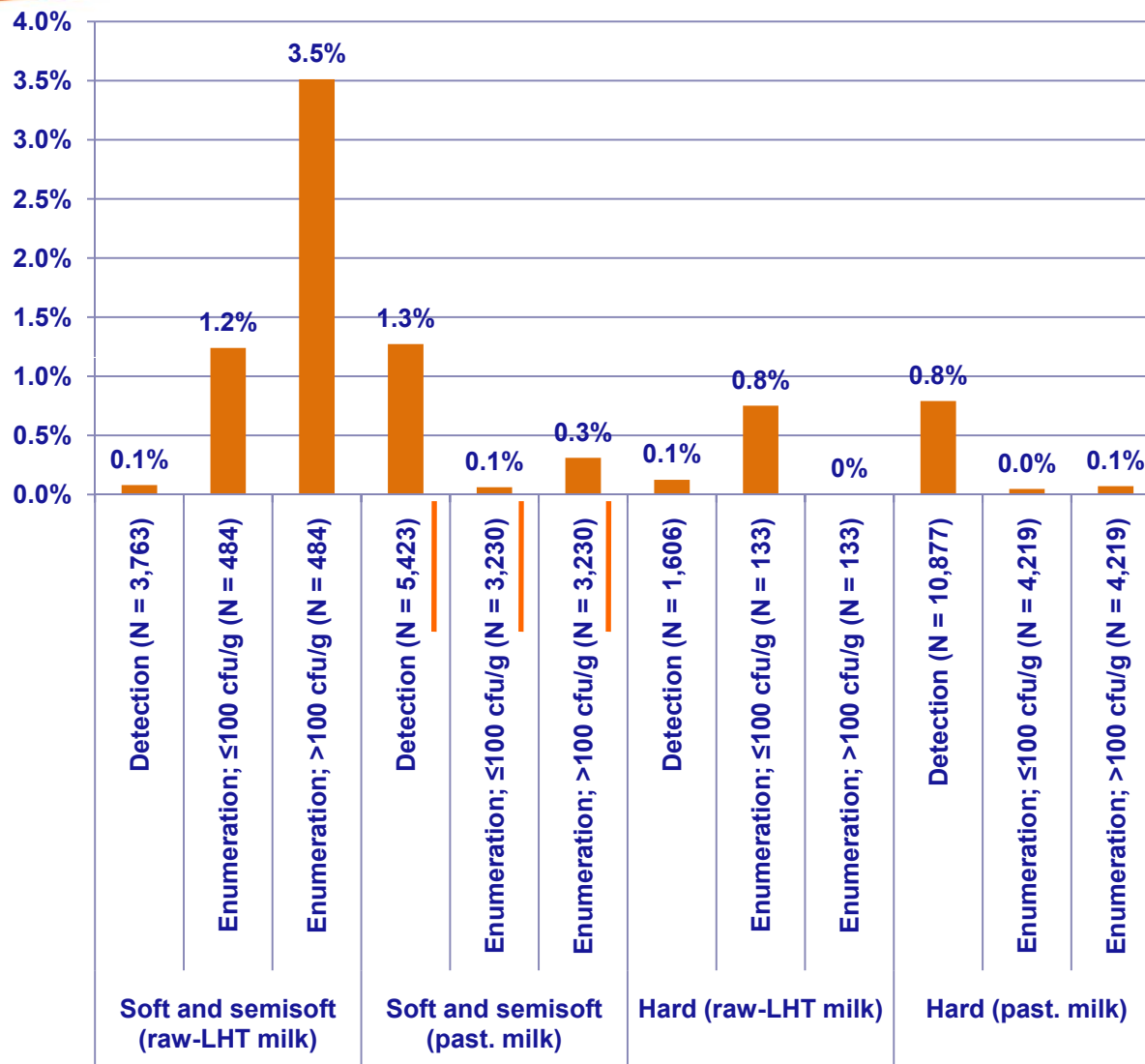
Large number of units (**128,000**) in **RTE foods** reported by **26 MSs**.

Majority of samples collected from:

meat, cheeses and fishery products, as in previous years

Data are only presented for sample size ≥ 25 .
Each point represents a MS observation.

Proportion of *L. monocytogenes* positive cheese samples, 2008



L. monocytogenes was isolated from cheeses made from: **raw, low heat-treated, pasteurised milk** as well as from **soft, semi-soft and hard cheeses**.

L. monocytogenes was most often detected in **soft and semi-soft cheeses made from pasteurised milk**.

Data are only presented for sample size ≥ 25 .

In 2008: **18 MSs** and **two non-MS** reported data on *Listeria* in animals.

L. monocytogenes and *Listeria* spp. were detected from different animal species, generally at a relatively low prevalence.

→ Animals act as one reservoir of *Listeria* bacteria although they rarely serve as a direct source of human infections

The highest prevalence was found in **sheep, goats and cattle.**

- Identification of **sources of human infections** (which foodstuffs/ animal species)
- Comparison of **prevalence/proportion positives** at **different food/animal categories/points of food chain**
- Analyses of **trends** over the years (in MS/ EU) for *L. monocytogenes* was performed **only for human data** (ECDC):
 - most cases the data received is **not directly comparable between the MSs**, but it is often comparable within one country between the reporting years, unless the monitoring system has changed

Main *L. monocytogenes* conclusions from 2008 data

- *L. monocytogenes* was seldom detected above the legal safety limit from RTE foods and findings over this limit were most often reported from **fishery products**, **cheeses**, **meat products** and **sandwiches** at levels of 0.2-0.5% in the EU.
 - Please view the poster:
“ EFSA’s proposal for an EU-wide retail survey on *Listeria monocytogenes* in selected categories of ready-to-eat food products”
(F. Boelaert, M.T.S. Felício and P. Makela)

Acknowledgements

- **Pia Mäkelä and team,**
(Zoonoses Data Collection Unit, EFSA)
- **Birgitte Helwich and team**
(Zoonoses Collaboration Centre -ZCC, DTU)
- **Johanna Takkinen and team**
(ECDC)

Thank you for your attention!

EFSA:

All our reports are available at: www.efsa.europa.eu



EFSA's official seat
Palazzo Ducale



EFSA's operational seat:
DUS building

mariateresa.dasilvafelicio@efsa.europa.eu

zoonoses@efsa.europa.eu