Elements & measures in crisis situation

The role of the national & European reference laboratories

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Anses and Institutions involved in food safety

Scientific Risk Assessment

European Union

- European Food Safety Authority (EFSA)
- ECHA (European Chemicals Agency)

France

- Anses (National Food Safety Agency)

Risk Management & Economic Support

European Commission

Ministry of Agriculture

National and EU Reference Labs
ANSES

- ANSES was created on July 1st 2010 by merging the agency in charge of **food safety** with the agency in charge of **occupational & environmental health safety**
- Agency reports to five ministries

ANSES contributes to:
- ensuring **human health & safety** regarding **environment, work & food** as well as
- **protecting animal health & welfare**
- **protecting plant health**

- Conduct, coordinate & initiate research projects
- Recommend public health measures
- Conduct laboratory reference missions
- Authorise marketing of veterinary medicinal products
- Collaborate with European and international agencies

Assess nutritional & health risks and benefits
ANSES Key facts & figures

✓ 1350 staff
✓ 800 external experts
✓ Annual budget: **130 million Euros**
✓ Over 8,000 Opinions issued since 1999
✓ 11 laboratories in 16 locations
✓ 67 National Reference Laboratory mandates,
  9 EURL mandates, 19 international mandates
Reference activities

for official analysis performance

within Anses, in France, in the EU
Food and water safety
Food and animal health
Main tasks for the Anses reference labs

• Reference

• Research

• Scientific and technical expertise

• Surveillance and Epidemiology
National mandates (67)

- including brucellosis for human health

European mandates (9)

- milk products;
- Staphylococcus toxins
- *Listeria monocytogenes*
- rabies (serology and virology)
- bees health
- equine diseases
- vet medicines residues and dyes
- brucellosis

OIE mandates:

- rabies, brucellosis, blue tongue, FMD, …
Reference activities

Reference = *(Regulation 882/2004 EC)*

- **Methods** development (→ official methods or standards)
- **Proficiency tests** under 17043 QA system (not mandatory)
- **Trainings, technical advice**
- **Results Confirmation** (under ISO 17 025 accréd)
- **Biological materials and kits** production and validation
Reference activities and outbreaks

Reference organization

= Official laboratories network at EU and national level (OIE/WHO)

+ official method with known and shared performance criteria

+ Competences

↓

confidence
Research in reference laboratories

→ "risk evaluation oriented":
  ✓ Host/pathogen interactions, pathogen virulence, toxin-producing mechanisms, contaminants toxicity, bio-accessibility
  ✓ vectors
    Epidemiology, Prevalence and distribution
    Modelisation of bacterial behaviour

→ "reference oriented" for methods development
  ✓ highthroughput qPCR and genomics dvpts:
  ✓ pathogenicity,
  resistance characterizations
  ✓ Toxicity investigations and chemicals identification
Research in Reference labs

= International scientific network
Reference materials, MS, and strains

+ High level technologies dvpt and mutualisation

Anticipation and reactivity
Scientific and technical expertise in routine and during outbreaks

To the relevant authorities ([EU], national and local levels):

On site expertises

« On text » advice

On line consultation
Reference and surveillance

What happen if we link reference laboratories networks and surveillance networks?

→ Samples collection

Strains characterization and identification

contaminants identification
Surveillance linked to reference activities and outbreaks

Reference labs

= National and EU (+international) surveillance potential network

+ methods of analysis and database shared criteria (potential guidelines)

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New EU and global approach of outbreaks understanding and management
As a conclusion about the role of reference laboratories

The EU [and international] reference activities system in outbreaks situations brings

→ Confidence between actors

Linked with research activities it adds

→ Reactivity and anticipation

Linked with surveillance involving stakeholders and international partners, it should improve

→ Global understanding and prevention of outbreaks
Thank you for your attention

www.anses.fr