

### **Elements & measures in crisis situation**

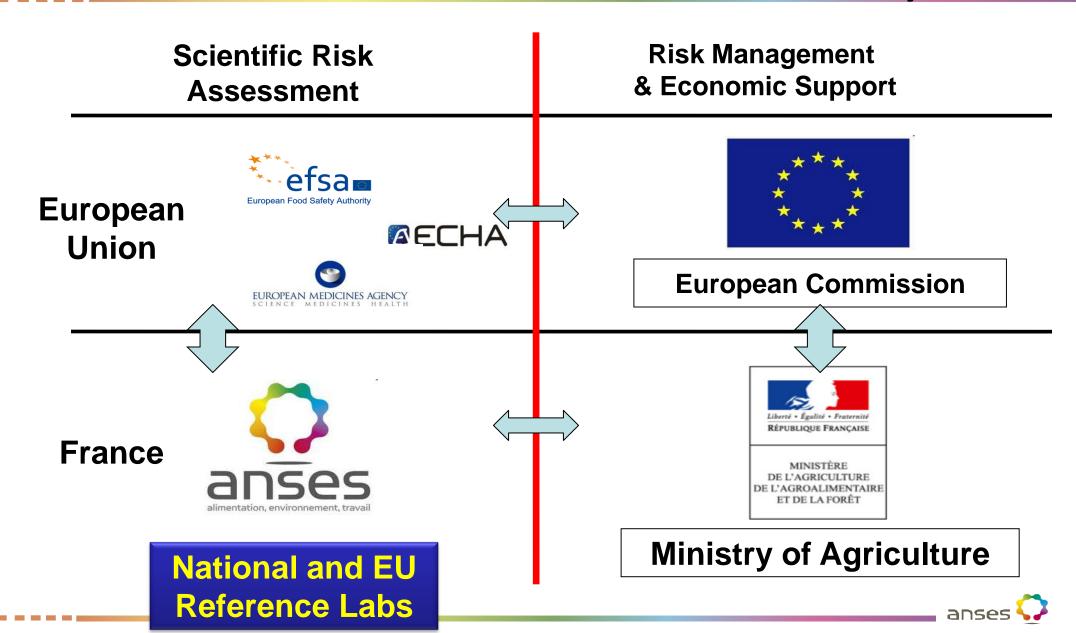
# The role of the national & European reference laboratories





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### **Anses and Institutions involved in food safety**

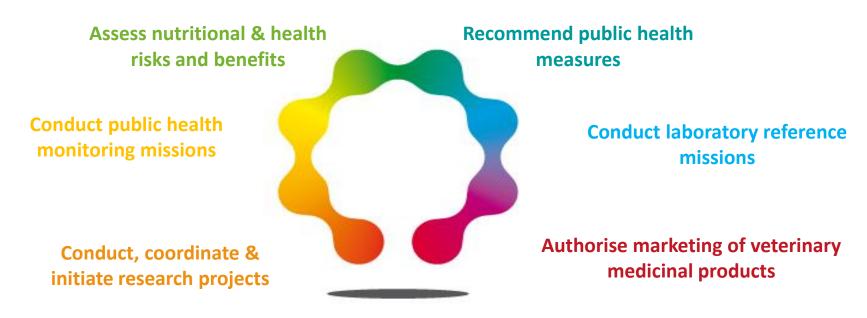


#### **ANSES**

- ANSES was created on July 1<sup>st</sup> 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



**Collaborate with European and international agencies** 



# **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



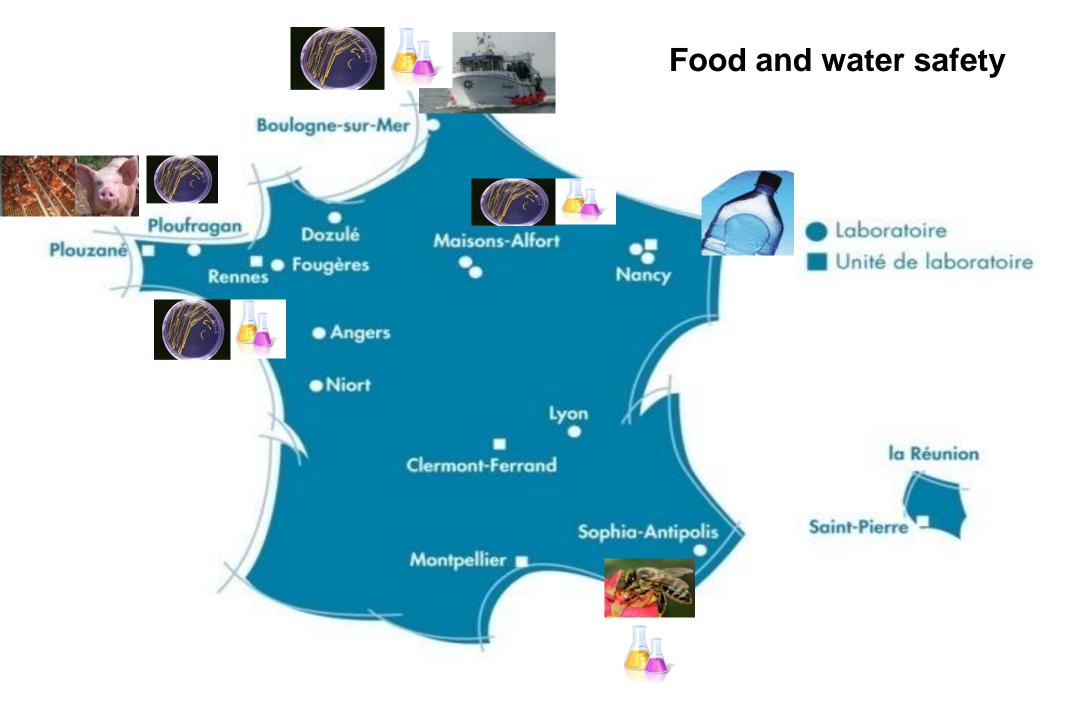
# Reference for analysis performance

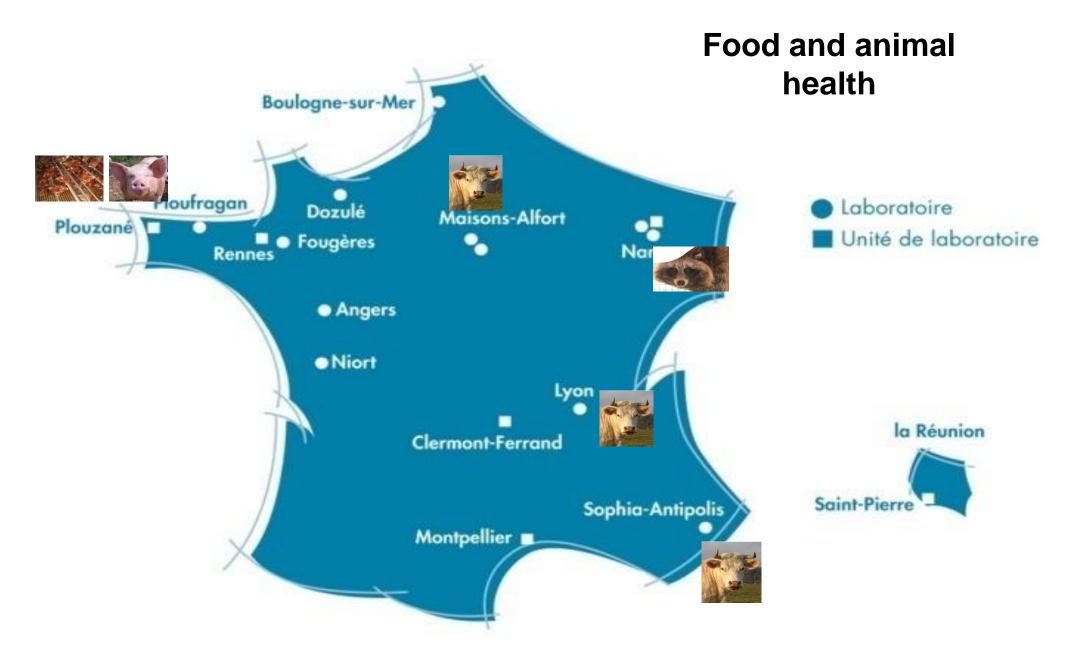
#### **Reference activities**

for official analysis performance

within Anses, in France, in the EU







#### Main tasks for the Anses reference labs

Reference



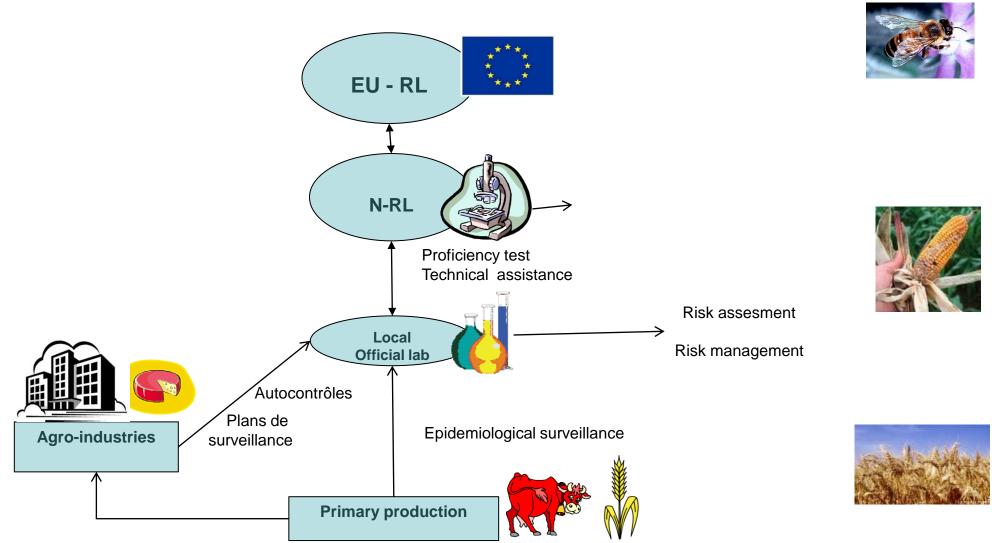
Research

- Scientific and technical expertise
- Surveillance and Epidemiology





# Reference framework (Reg 882/2004 EC)





### Reference activities,

#### National mandates (67)

including brucellosis for human health



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, ...



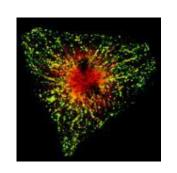




#### Reference activities

#### 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



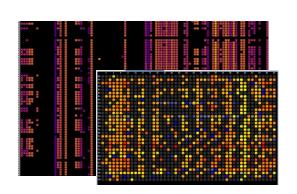


### Research end reference

#### Research in reference laboratories

- → « risk evaluation oriented » :
- ✓ Host/pathogen interactions, pathogen virulence, toxinproducing mechanisms, contaminants toxicity, bioaccessibility

- ✓ vectors
  Epidemiology, Prevalence and distribution
  Modelisation of bacterial behaviour
- → « reference oriented » for methods development
  - ✓ highthrouput qPCR and genomics dvpts:
  - ✓ pathogenicity,
  - resistance characterizations
  - ✓ Toxicity investigations and chemicals identification





#### Research activities and outbreaks



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)



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





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

