

## What is meant by reference activities?

For certain pathogens (viruses, bacteria, parasites) or major chemical contaminants, either regulated or emerging, the health authorities need to have the support of an effective surveillance system which depends on a network of reliable laboratories in order to conduct official analyses.

For each pathogen or regulated contaminant under surveillance, laboratories accredited for conducting analyses, as well as a "reference" laboratory, are appointed by the health authorities. This reference laboratory guarantees the reliability of the analyses conducted by all of the accredited laboratories. It may have:

- a **national** mandate (NRL for animal health, plant health or food safety),
- a **European** mandate (EURL, in which case it leads a network of national reference laboratories) or,
- an **international** mandate (OIE Reference Laboratory).

Depending on the pathogen or contaminant being investigated and the level of circulation of the agent under scrutiny, the number of accredited laboratories to be supervised can vary from just a few to nearly one hundred.

A collaborating centre (OIE or WHO) and a reference centre (EU or FAO) are centres of expertise appointed in a particular area of competence.

ANSES holds 65 national reference mandates, 13 European mandates and 28 international mandates.

 **Food and Agriculture Organization of the United Nations**  
• FAO RC: FAO Reference Centre

 **World Health Organization**  
• WHO CC: WHO Collaborating Centre

 **World Organisation for Animal Health**  
• OIE RL: OIE Reference Laboratory  
• OIE CC: OIE Collaborating Centre

 **European Union**  
• EURL: European Union Reference Laboratory  
• EURC: European Union Reference Centre

 **National**  
• NRL: National Reference Laboratory

Reference Laboratories develop and validate official analysis methods for pathogens or contaminants for which they have been designated and send them to Laboratories in view of their accreditation.

In order to guarantee the accuracy of the analyses conducted by the laboratory network it coordinates, a Reference Laboratory organises training sessions on the newly developed methods and performs inter-laboratory proficiency tests (ILPTs), which test the effectiveness of official analyses.

These inter-laboratory proficiency tests are organised at a rhythm which is determined by the Reference Laboratory itself depending on the difficulty of the method implemented and the maturity of the laboratory network. Frequency varies between one and four tests over a two-year period.

In practice, the Reference Laboratory sends the accredited laboratories samples to analyse, the contents of which are known only to the Reference Laboratory itself. Accredited laboratories implement the official method and submit their results to the Reference Laboratory. All non-compliant results require discussions with the laboratory or laboratories concerned, in order to identify the adjustments which need to be applied.

These reference activities place ANSES at the core of the analysis networks. Thus, the Agency benefits from a direct link to the field, which is essential for its monitoring and alert missions, and which enables it to be highly responsive when pathogens or contaminants emerge or re-emerge in France.

## Reference Mandates

October 2019

# ANSES Reference Mandates

**FRENCH AGENCY FOR VETERINARY MEDICINAL PRODUCTS**

**OIE Mandates**

Veterinary medicinal products	OIE CC
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**FOUGÈRES LABORATORY**

**EU Mandates**

Residues of antibacterial substances and dyes in food	EURL
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**NATIONAL Mandates**

Antimicrobial resistance	NRL
Residues of veterinary medicinal products and dyes in foodstuffs of animal origin and animal feed (except glucocorticoids) (Annex I of Council Directive 96/23/CE)	NRL

**LYON LABORATORY**

**NATIONAL Mandates**

Transmissible spongiform encephalopathies	NRL
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**NANCY LABORATORY FOR HYDROLOGY**

**NATIONAL Mandates**

Water intended for human consumption, natural mineral water and water used for leisure activities	Biology NRL
Water intended for human consumption, natural mineral water and water used for leisure activities	Chemistry NRL

**NANCY LABORATORY FOR RABIES AND WILDLIFE**

**WHO Mandates**

Zoonoses (research and management)	WHO CC
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**OIE Mandates**

Rabies	OIERL
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**EU Mandates**

Rabies	EURL
Rabies serology	EURL

**NATIONAL Mandates**

<i>Echinococcus</i> spp.	NRL
Rabies (including monitoring the effectiveness of rabies vaccines)	NRL

**SOPHIA ANTIPOLIS LABORATORY**

**OIE Mandates**

Bee diseases (7 mandates <sup>1</sup> )	OIERL
Q Fever	OIERL

**EU Mandates**

Bee health	EURL
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**NATIONAL Mandates**

Bee health	NRL
Pesticides in food of animal origin and commodities with high fat content	Laboratory affiliated to the NRL
Pesticides requiring single-residue methods	Laboratory affiliated to the NRL
Q Fever	NRL

**LABORATORY FOR ANIMAL HEALTH Maisons-Alfort and Normandy sites**

**FAO Mandates**

Brucellosis	FAORC
Foot-and-mouth disease	FAORC

**OIE Mandates**

Avian chlamydiosis	OIERL
Bovine tuberculosis	OIERL
Brucellosis (3 mandates <sup>2</sup> )	OIERL
Enzootic abortion of ewes (ovine chlamydiosis)	OIERL
Epizootic haemorrhagic disease	OIERL
Foodborne zoonotic parasites from the European Region	OIE CC
Foot-and-mouth disease	OIERL
Glanders	OIERL
Ovine epididymitis ( <i>Brucella ovis</i> )	OIERL

**EU Mandates**

Brucellosis	EURL
Equine diseases (other than African horse sickness)	EURL
Foot-and-mouth disease <sup>3</sup>	EURL

**NATIONAL Mandates**

African horse sickness	NRL
Animal anthrax	NRL
Avian chlamydiosis	NRL
Bluetongue	NRL
Brucellosis in animals (including official control of brucellins)	NRL
Contagious equine metritis	NRL
Dourine	NRL
Epizootic haemorrhagic disease in deer	NRL
Equine herpes virus	NRL
Equine infectious anaemia	NRL

**Continued**

Equine viral arteritis	NRL
Food-borne parasites, excluding <i>Echinococcus</i> sp.	NRL
Foot-and-mouth disease	NRL
Glanders	NRL
Swine vesicular disease	NRL
Tuberculosis (including official control of reagents for use in analyses, especially tuberculin)	NRL
Tularaemia (clinical form)	NRL
Vesicular stomatitis	NRL
Viral encephalitis in equids: West Nile encephalitis	NRL

**PLANT HEALTH LABORATORY**

**EU Mandates for plant pests**

Insects and mites <sup>3</sup>	EURL
Fungi and oomycetes	EURL
Nematodes <sup>3</sup>	EURL

**NATIONAL Mandates**

Bacteria (bananas, citrus and tropical plants)	NRL
Bacteria (other matrices)	NRL
Fungi (all matrices)	NRL
GMO in maize (vegetative parts), potato, beet, rice, cotton, wheat and vegetable plants (seeds and vegetative parts)	NRL
Insect and mite plant pests and biological control agents (all matrices)	NRL
Invasive plants	NRL
Phytoplasmas (all matrices)	NRL
Plant parasitic nematodes (all matrices)	NRL
Sharka virus (PPV), potato viruses and citrus viruses	NRL
Viroids (all matrices)	NRL
Viruses (bananas and tropical plants)	NRL
Other viruses	NRL

**LABORATORY FOR FOOD SAFETY Maisons-Alfort and Boulogne-sur-Mer sites**

**EU Mandates**

<i>Listeria monocytogenes</i>	EURL
Coagulase positive staphylococci (including <i>Staphylococcus aureus</i> )	EURL

**NATIONAL Mandates**

Avian botulism	Laboratory affiliated to the NRL
Coagulase-positive staphylococci, including <i>Staphylococcus aureus</i> and staphylococcal enterotoxins	NRL
Food-borne parasites, excluding <i>Echinococcus</i> sp.	Laboratory affiliated to the NRL
Foodborne viruses in foodstuffs of animal origin (other than shellfish)	NRL
Histamine in fishery and aquaculture products	NRL
<i>Listeria monocytogenes</i>	NRL
Marine biotoxins	NRL
Pesticide residues in foodstuffs of animal origin and high-fat products (Annex I of Council Directive 96/23/EC)	NRL
Pesticide single-residue methods	NRL
<i>Salmonella</i> spp.	Laboratory affiliated to the NRL
Trace metals in foodstuffs of animal origin (Annex I of Council Directive 96/23/EC)	NRL
<i>Vibrio</i> spp. in fishery products	NRL

**PLOUFRAGAN - PLOUZANÉ - NIORT LABORATORY**

**OIE Mandates**

Aujeszky's disease	OIERL
Infectious bursal disease (Gumboro disease)	OIERL
Paratuberculosis	OIERL
Turkey rhinotracheitis	OIERL

**EU Mandates**

Welfare of poultry and other small farmed animals <sup>4</sup>	EURC
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**NATIONAL Mandates**

African swine fever	NRL
Antimicrobial resistance	Laboratory affiliated to the NRL
Aujeszky's disease	NRL
Avian botulism	NRL
Avian influenza	NRL
Avian salmonellosis	NRL
Bovine hypodermosis	NRL
Bovine viral diarrhoea	NRL
<i>Campylobacter</i> spp.	NRL
Classical swine fever	NRL
Enzootic Bovine Leukosis	NRL
Infectious bovine rhinotracheitis	NRL
Mycoplasmoses in poultry	NRL
Newcastle disease	NRL
Listed fish diseases	NRL
<i>Salmonella</i> spp.	NRL
Swine influenza	NRL

<sup>1</sup> Infection of honey bees with *Melissococcus plutonius* (European foulbrood) / *Paenibacillus larvae* (American foulbrood) / Infestation of honey bees with *Acarapis woodi* / *Tropilaelaps* spp. / *Varroa* spp. (Varroosis) / *Aethina tumida* (Small hive beetle) / Nosemosis of honey bees.

<sup>2</sup> *Brucella abortus*, *Brucella melitensis*, *Brucella suis*.

<sup>3</sup> As a leader of a consortium with at least one partner.

<sup>4</sup> As of 1 January 2020.