Through the commitment of its employees and expert groups, backed by the members of its Board of Administrators, Scientific Board and Committee for Ethical Standards and Prevention of Conflicts of Interest, and with the support of its supervisory ministries, parliamentarians and stakeholders, ANSES constantly strives to fulfil its mission to safeguard health in the most precise and effective way: producing benchmark scientific information, independent of any particular interest, in order to provide maximum insight for public policy-making.

2018 was a particularly busy year for ANSES, which worked intensively to support the ministries during health crises, publish several reference risk assessments on topics such as electromagnetic hypersensitivity, animal welfare and alternatives to neonicotinoids, enhance the effectiveness of its regulated product assessments, and contribute to developing and implementing numerous national plans to improve environmental or occupational health.

The Agency’s missions were also expanded once again in 2018: it was asked to address the issue of vectors, encompassing human, animal and plant health, and to assess the occupational disease tables prior to their amendment. Regarding its reference activities, it was awarded symbolic new national, European and international mandates, such as the one on foot-and-mouth disease surveillance.

To optimise its operations and enhance its effectiveness, the Agency embarked on several priority actions, including the creation of six cross-functional scientific departments to further integrate its various missions, the implementation of a new economic model for regulated products to enable it to adapt its resources and reduce processing times, and the consolidation of staff at its laboratories’ sites.

Faced with numerous questions from society and consulted on complex issues in situations of great uncertainty, sometimes with very tight deadlines, the Agency worked tirelessly throughout 2018 to fulfil its mission and meet its commitment to safeguard health for all.
In 2018, ANSES once again made its expertise available to all, both for anticipating risks and responding to health crises.

One of the essential challenges for the Agency is to maintain this scientific capability, to which it owes its reputation and credibility, through an attractive human resources policy and the mobilisation of expertise in the public interest.

In its role as a governance body, the Board of Administrators ensures that a satisfactory proportionate ratio is constantly maintained between ANSES’s missions – which have increased in recent years – and its resources, within tightened budgetary constraints. This topic, like the issue of workload, is a central concern if the Agency is to continue meeting the highest standards in the future.

Made up of five colleges bringing together representatives of the State, various associations, professional bodies, trade unions and elected officials, ANSES’s Board of Administrators is one of the key elements of its strength. It has a crucial role in nurturing the Agency’s development by maintaining a rewarding dialogue with it through the participation of all parts of civil society.

All the members have a duty to support its day-to-day interactions to enable ANSES to define its strategic orientations in an ever-changing scientific and societal environment, and continue to fulfil its role.

As autumn 2019 will mark the end of the current Board’s term of office, I would like to thank all its members for their active participation, the quality of their debates, and their unwavering support for the Agency’s activities.
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KEY DATES

**January**
9th to 10th: ANSES in the Netherlands as part of the European benchmarking of laboratories
15th: Foundation stone laid for the new building of the French Agency for Veterinary Medicinal Products
30th: More than 40 partners from 19 European countries launched the European Joint Programme on “One Health” coordinated by ANSES

**February**
1st: Gilles Salvat appointed ANSES Managing Director General for Research and Reference
6th: Presentation by Roger Genet at the French Training Institute for Farming Managers (IFOCAP) on “Governance for risk management based on collective and independent expert appraisal”
7th: ANSES took part in the European Food Safety Authority’s first meeting on risk assessment research
9th: Annual meeting of the Directors General of ANSES, BfR (Germany) and DTU-Food (Denmark) in Berlin
12th: Creation of the ANSES internal audit committee
24th: ANSES participated in the 55th Paris International Agricultural Show and signed several framework agreements (Ifremer, INRA, GDS-France, ONCFS)

**March**
1st: Visit of the ANSES stand at the International Agricultural Show and interview with Vytenis Andriukaitis, European Commissioner for Health & Food Safety
12th to 13th: In-house scientific seminar on the cross-functional scientific theme “Antimicrobial resistance”
13th: ANSES signed the National Charter for Research Integrity and the National Charter for Expertise
27th: Opinion - ANSES recommended scaling up research efforts on hypersensitivity to electromagnetic waves and providing suitable care for the people concerned
**April**

4th: Hearing before the French National Assembly’s Investigation Committee on occupational diseases and pathologies in industry

5th: Meeting of ANSES experts on the theme “Science for expert appraisal: between evolution and innovation”

7th: Launch of the series of scientific conferences “ANSES invites...” with Ellen Mantus, National Academies of Sciences, Engineering & Medicine (United States)

10th: The General Directorate visited the National Institute for Public Health and the Environment (Netherlands)

23rd: Opinion - ANSES restricted the use of creosote products to railway sleepers

23rd to 24th: Along with EFSA and EPPO, ANSES organised the international conference “Impact of global change on the emergence of plant diseases and pests in Europe”

24th: New National Reference Laboratory mandate for the detection of foodborne viruses in foodstuffs of animal origin excluding shellfish

25th: Opinion - ANSES proposed a definition of animal welfare

**May**

22nd to 23rd: Foodborne biological risks in the spotlight at the ANSES Biorisk Days “The experts sit down to eat!”

24th: ANSES organised the 13th meeting of the Reference Panel

30th: Opinion - Risks and benefits of plant protection products containing neonicotinoids compared with their alternatives

**June**

1st: First internal call for projects on “cross-cutting links” issued by the Strategy and Programmes Department

6th: Publication of new data on cancers of occupational origin collected through the RNV3P network

11th: Annual bilateral meeting between ANSES and the European Food Safety Authority in Maisons-Alfort

14th: Inauguration of the new building of the Laboratory for Food Safety in Boulogne-sur-Mer in the presence of partners and local authorities

14th: Hearing before the French National Assembly’s Investigation Committee on industrial food

18th: Annual bilateral meeting between ANSES and the European Chemicals Agency in Helsinki (Finland)

20th: Signature of the framework agreement for the epidemiological surveillance platform for animal health, of which ANSES is a member

25th: Launch of the national exploratory campaign to measure pesticide residues in air with Atmo-France, Ineris and the network of approved air quality monitoring associations

25th to 26th: In-house scientific seminar on the cross-functional scientific theme “Epidemiology and surveillance”

27th to 28th: ANSES organised the first symposium for DIM Health, a project on infectious diseases supported by the Île-de-France region

28th: Opinion - recommended new priority pollutants for air quality monitoring
**JULY**

**2nd to 8th:** The Plant Health Laboratory hosted a “Plant Quality and Health” summer school in Angers

**4th:** Opinion - ANSES recommended better consumer protection from risks to skin associated with chemicals in textiles and footwear

**9th:** Signature of the framework agreement for the epidemiological surveillance platform for plant health, of which ANSES is a member

**18th:** Opinion - “Anti-pollution” masks: not enough data to demonstrate a health benefit and justify recommending their use

**19th:** Opinion - Assessment of the safety of feminine hygiene products

**23rd:** Agathe Denéchère appointed Deputy Director General for General Affairs at ANSES

**25th:** Opinion - ANSES reiterated the precautions to be taken with regard to allergies to pollen and food supplements

**SEPTEMBER**

**10th:** The Institut Pasteur and ANSES organised a seminar in Maisons-Alfort on the regulation of micro-organisms and toxins

**11th to 14th:** ANSES was present at the International Livestock Trade Fair (SPACE) in Rennes

**12th to 13th:** In-house scientific seminar on the cross-functional scientific theme “Plant health”

**18th:** Opinion – Synthetic sports pitches: a health risk of little concern

**24th to 26th:** The international symposium "Salmonella and Salmonellosis" jointly organised by ANSES, brought the international scientific community together in Saint-Malo

**25th:** Mergers of the Ploufragan-Plouzané and Niort Laboratories, and the Maisons-Alfort and Dozulé Laboratories for Animal Health: ANSES now relies on nine laboratories located throughout France

**AUGUST**

**27th to 28th:** Kick-off meeting in Maisons-Alfort of the European POSHBEES project on bee health, in which ANSES is participating, with 55 participants from 42 institutions and 14 countries

**24th to 25th:** Agathe Denéchère appointed Deputy Director General for General Affairs at ANSES

**25th:** Opinion - ANSES reiterated the precautions to be taken with regard to allergies to pollen and food supplements
October
1st: Meeting with Jean-Éric Paquet, European Commission Director General for Research and Innovation

2nd: PNR EST Scientific conferences co-organised by ANSES, INCa and Aviesan on the “Risks of cancer associated with occupational or environmental exposure”

10th: Opinion - ANSES issued a reminder of the proven risk of skin cancer associated with artificial tanning

16th to 19th: A delegation from ANSES took part in the scientific symposium and public debates on chlordecone pollution held in Martinique and Guadeloupe

18th to 19th: First seminar of the thematic research network for animal health in the Auvergne-Rhône-Alpes region, jointly organised with VetAgro Sup and INRA

24th: PNR EST Scientific conferences co-organised with the National Research Agency on the theme of “Occupational health”

29th to 31st: ANSES took part in the Global Conference on Antimicrobial Resistance organised by the World Organisation for Animal Health (OIE) in Marrakesh, Morocco

November
5th to 7th: Directorate General’s mission to the National Technological University of Singapore on the theme of genome sequencing and exchanges with the Food Safety Agency

8th: 5th national professional reference day co-organised with GDS France

13th: ANSES organised a scientific conference on “Antimicrobial resistance in animal health and the environment”

29th: The Plouragan-Plouzané-Niort Laboratory celebrated its 60th anniversary. Signature of the ANSES-CEA Tech framework partnership agreement

December
5th to 7th: ANSES brought its young researchers together for its Scientific and Doctoral Days

6th: The Plant Health Laboratory was appointed European Union Reference Laboratory for the “insects and mites” and “nematodes” mandates

12th: ANSES organised its seventh “Bee health” day

19th: Opinion - Strategies to control the red palm weevil, particularly in the Mediterranean area

21st: 43 projects were selected under the calls for projects of the National Research Programme on Environmental and Occupational Health
ANSES is a public administrative body founded in 2010 and accountable to the French Ministries of Agriculture, Consumer Affairs, the Environment, Health and Labour.

ANSES’s expertise covers health risk assessment in the fields of food, the environment and work, supported by a network of nine laboratories, with a view to informing the public authorities on health matters.

The Agency is responsible for human, animal and plant health issues, subscribing to the concept of “One Health” for the benefit of all. It assesses all the chemical, biological and physical risks to which humans may be exposed, intentionally or otherwise, at all ages and times of their lives, whether at work, while travelling or engaging in leisure activities, and via their food.

It relies on a form of governance that is open to all the stakeholders, and on dialogue committees whose mission is to inform the Agency about society’s expectations in terms of risk assessment and research.

1,407 employees
9 laboratories and 16 sites spread throughout metropolitan France and the overseas territories
5 vigilance schemes
130 formal requests processed, including 14 emergency requests (<2 months)
70 news updates published
31 scientific events organised
4,000 decisions issued in the field of regulated products
43 projects selected for funding under the 2018 calls for research projects for a total of 7.4 million euros
376 internationally renowned category A and A+ scientific publications
65 national reference mandates, 9 European and 25 international reference mandates
5 partnership agreements signed

INVESTIGATE, EVALUATE, PROTECT
A broad range of hazards (biological, chemical or physical) can potentially affect the health of humans, animals or plants. ANSES assesses risks to human health associated with food and nutrition, the environment and the workplace; it also assesses risks to animal health and welfare, and to plant health. Input for the Agency’s health risk assessment missions comes from the knowledge generated by its monitoring, research and reference activities. In return, risk assessment guides the monitoring initiatives and helps identify new avenues for research. The Agency’s expert appraisals lead it to issue opinions and recommendations for informing public action in order to implement effective risk management measures. In this way, ANSES contributes to the safety of populations in their everyday lives.
OUR AREAS OF ACTIVITY

Research and reference
The nine ANSES laboratories located throughout the country conduct research to acquire scientific knowledge on health hazards that threaten animal health and welfare, food safety and plant health. More than 600 scientists and technicians work to better detect, identify, characterise, monitor and prevent known and emerging pathogens.

The ANSES laboratories hold national, European and international reference mandates. As such, they develop and validate official analytical methods for the pathogens or contaminants for which they have been appointed, manage the network of laboratories accredited for carrying out these analyses and contribute to epidemiological surveillance.

ANSES also operates the National Research Programme for Environmental and Occupational Health (PNR EST), financed from budgets delegated by the Ministries of the Environment and Labour, as well as money from partner funding institutions. The research projects it finances generate data of use for risk analysis in the areas of occupational and environmental health.

Expert appraisal
Drawing on all the available scientific knowledge, ANSES conducts expert appraisals to support public policy-making. It takes into account the exposure of citizens in a cross-cutting and all-encompassing way that enables it to assess the risks they face while reflecting as closely as possible the realities of their everyday lives, at work, during their leisure activities, etc. To carry out its assessment missions, ANSES calls on the expertise of its in-house scientists and more than 800 scientific experts, chosen in both cases on the basis of their competence and independence, who it mobilises in its expert groups (Expert Committees and Working Groups) as well as in its laboratories located throughout France.

ANSES is also responsible for assessing chemicals in the framework of the European REACh and CLP. As such, it proposes risk management measures for certain chemicals and communicates them to its supervisory ministries and/or to the European Chemicals Agency (ECHA).

Assessment and marketing of regulated products
The Agency also assesses the effectiveness of plant protection products, fertilisers, growing media, adjuvants, biocidal products and their active substances, as well as the risks associated with their use. On the basis of the conclusions of its scientific assessments, it then issues, amends or withdraws marketing authorisations (MAs) and permits for all of these products, in compliance with European and national regulatory frameworks.

The French Agency for Veterinary Medicinal Products (ANMV), part of ANSES, is the competent authority for assessing and managing risks and granting MAs for veterinary medicinal products, and for authorising veterinary pharmaceutical establishments in France.

Monitoring, vigilance and surveillance
ANSES performs vigilance and surveillance missions that are an integral part of the national health monitoring system. It is responsible for five vigilance schemes and is involved in numerous surveillance schemes, each operating according to different rules, principles, governance and data sources. These various actions feed into its risk assessments by informing it of actual conditions in the field, through the reporting of alerts, thus enabling the Agency to respond more efficiently in the event of a health crisis.

ad hoc vigilance schemes
- Nutrivigilance, for monitoring adverse effects associated with the consumption of food supplements, fortified foods and so-called “novel foods”;
- Toxicovigilance, for the toxic effects on humans of everyday products, edible or inedible plants, animals, etc.;
- Veterinary pharmacovigilance, for the adverse effects of veterinary medicinal products;
- Phytopharmacovigilance, for the adverse effects of pesticides;
- The National Network for Monitoring and Prevention of Occupational Diseases (RNV3P), for risks in the workplace.

ANSES carries out its missions with full independence and transparency, in accordance with the principles of ethics and scientific integrity and using multiple data sources. It explains its work and makes it available to all stakeholders to better safeguard health, contribute to public debate and inform the population about health risks and their prevention.
ANSES’S ORGANISATION AND MISSIONS
Between continuity and renewal, ANSES restructured its organisation in 2018 and reaffirmed its ambition for 2025. It signed a new goals and performance contract and extended its scope to include new missions. The Agency restructured its laboratories to improve the coherence and clarity of its research activities. It is also pursuing its ethics and scientific integrity approach in order to disseminate it more widely and support its experts and researchers.

In addition, ANSES stepped up its mission to support public policy-making and strengthened its ties with French, European and international institutions. It worked to promote exchanges with stakeholders, engaging in a continual dialogue with society regarding its work.

Renewed ambition and objectives

A NEW GOALS AND PERFORMANCE CONTRACT FOR THE PERIOD 2018-2022

ANSES’s new Goals and Performance Contract (COP) 2018-2022 was signed with its five supervisory ministries in February 2018. As the Agency’s true roadmap, it defines its main strategic orientations and sets its objectives for the next five years with a view to steadily improving the Agency’s operations and continuing to strive for ever greater excellence, openness and independence.

The COP is structured around five strategic themes, broken down into 19 objectives and accompanied by 22 indicators. Sixteen milestones have been defined to assess progress in the implementation of the objectives.
ANSES’S SIX CROSS-FUNCTIONAL DEPARTMENTS

Scientific Department for the “Animal health & welfare” cross-functional theme
Gilles Salvat

Scientific Department for the “Plant health” cross-functional theme
Charles Manceau, then Philippe Reignault

Scientific Department for the “Food safety” cross-functional theme
Charlotte Grastilleur

Scientific Department for the “Antimicrobial resistance” cross-functional theme
Jean-Yves Madec

Scientific Department for the “Exposure to and toxicology of chemical contaminants” cross-functional theme
Pascal Sanders

Scientific Department for the “Epidemiology and surveillance” cross-functional theme
Pascal Hendrikx
ANSES 2025

The Ambition set for ANSES by 2025 is the result of a cross-cutting, participative internal debate.

Since 2017, the Agency as a whole has been engaged in a process aimed at gaining a better understanding of the increasingly complex issues it will face in the next few years, particularly emerging issues, and a shared vision of what it wants to strive for in an ever-changing context. This process will help it achieve the objectives of the COP, which determines the roadmap for the coming years, with a more long-term perspective. For 18 months, the ANSES teams conducted discussions to define together the Agency’s objectives, its founding values and its ambition for 2025.

Three workshops, nine working groups, nearly 30 internal meetings, two seminars, 20 hearings of external partners, and five internal and external questionnaires spread over 18 months gave rise to numerous proposals from the working groups. Some of them were implemented during the process, such as the cross-functional in-house scientific seminars, while others will be addressed by a synopsis and action plan to be initiated in 2019. This process was described in a document entitled “ANSES: Ambition 2025”, which aims to unite the entire Agency on the basis of common values.

Through this dynamic, which tends to be shared with its partners in France, Europe and internationally, ANSES’s objectives are to:

- consolidate its role to guarantee the health and safety of populations in the face of all exposure risks by providing decision-makers with the components of an independent scientific expert appraisal based on the best available scientific knowledge;

- be recognised internationally as a key player in risk assessment for safeguarding health.

WORKSHOP 1 - THE EFFECTIVENESS OF INTERNAL PROCESSES

Theme 1 - How to reduce irritants and improve the current reporting system
Theme 2 - How to better manage and promote the “Expert sector”
Theme 3 - Development of cross-cutting links and a common culture

WORKSHOP 2 - MISSIONS TO OVERSEE ADVANCES ON HEALTH AND SAFETY ISSUES

Theme 1 - Monitoring, vigilance, surveillance, alerts: how to develop greater coherence, clarity and efficiency
Theme 2 - Broadening the scope of expertise and adapting it to new challenges

WORKSHOP 3 - A STRATEGY FOR COOPERATION, PARTNERSHIPS AND COMMUNICATION

Theme 1 - Procedures for public/private partnerships and capitalising on ANSES’s work
Theme 2 - Public/public partnership strategy
Theme 3 - Europe & international strategy, influence
Theme 4 - Communication and dialogue with society
THREE NEW MISSIONS OR EXPERT APPRAISAL ACTIVITIES ENTRUSTED TO ANSES

Tobacco and vaping products
This mission is in line with the implementation of Directive 2014/40/EU, which requires manufacturers of tobacco and related products (mainly for vaping) to register their products with the competent authorities of each Member State concerned prior to marketing. In 2016, ANSES was appointed to collect and analyse the information provided by manufacturers. The Agency provides the competent authority – the Ministry of Health – with scientific and technical support to improve knowledge of these products. This support takes the form of scientific expert appraisal work to identify and assess the hazards of chemicals to which consumers or people around them are exposed when using these products, particularly the ingredients and additives they contain, and especially the volatile compounds formed in emissions and inhaled. To assist it in this task, the Agency set up a working group on “Tobacco and vaping products”, which began work in 2018 and commissioned its first campaign to verify cigarette emissions from the National Metrology and Testing Laboratory. The Agency has published the list of products declared and their composition on its website.

Vectors
On 1 January 2018, ANSES was entrusted with a new expert mission for risk assessment in the field of vectors and vector control for human, animal and plant health. This led the Agency to set up a multidisciplinary expert group on vectors with competence in human, animal and plant health. With the help of this permanent working group, it has already published several opinions, in particular on the dengue fever epidemic on Reunion Island. ANSES defined a roadmap for 2019-2022 on the expert appraisal work it plans to carry out, in agreement with its supervisory ministries. In particular, it plans to conduct methodological work to assess the effectiveness and impact of vector control measures, carry out risk assessments according to epidemic situations (on African swine fever in 2019, for example) and work on the problem of resistance of mosquito vectors to different insecticides and improving spatio-temporal surveillance of vectors.

Occupational disease tables
In 2018, ANSES added a new activity to its occupational health portfolio: conducting expert appraisals prior to the creation and amendment of occupational disease tables under the general scheme and the agricultural scheme, and drafting recommendations for the regional committees enabling them to recognise occupational diseases (CRRMP). This work is part of the changes driven by public authorities with regard to recognition of occupational diseases, taking into account the development of scientific knowledge and professional practices. This new dynamic requires independent collective scientific expertise. More specifically, it aims to characterise the causal link between diseases and occupational activity.

A call for applications was issued in late 2018 to set up the expert group that will be working on this subject in the coming years. The first two formal requests to the Agency concern studies of the link between occupational exposure to asbestos and primarily ovarian, laryngeal, stomach and colorectal cancers, and of the links between occupational exposure to pesticides and different diseases.
A NEW ORGANISATION
WITHIN THE LABORATORIES

Major changes took place in the organisation of the Agency’s laboratories in 2018 and will also have an impact on 2019. Following recommendations resulting from their collective audit, the merger of the Ploufragan-Plouzané Laboratory with the Niort Laboratory has created a single laboratory of a size suitable for addressing the health and welfare challenges of livestock animals (ruminants, pigs, poultry, rabbits and fish). Similarly, the merger of the Maisons-Alfort Laboratory for Animal Health with the Dozulé Laboratory for Equine Diseases now combines all the Agency’s reference and research potential for horse health within the same scientific and administrative structure.

These mergers are guided by a concern for scientific consistency and better administrative support for teams when setting up collaborative programmes. In addition, in order to concentrate the Agency’s strengths in epidemiology, surveillance and vigilance, the epidemiology and surveillance units of the Lyon Laboratory have merged, as have the epidemiology and animal welfare units of the Ploufragan-Plouzané-Niort Laboratory. These mergers have enabled the creation of larger scientific units better able to pool their skills to meet their research and surveillance challenges.

ANSES RENEWED TEN OF ITS EXPERT GROUPS

Following a call for applications issued in 2018, ANSES renewed ten of its independent expert groups (Expert Committees - CES, or Permanent Working Groups - WG) in the areas of food, nutrition, animal feed, animal health and welfare, and plant health. These groups are called on to conduct health risk assessments.

ANSES systematically undertakes independent, collective, adversarial and collegial expert appraisals. It selects experts from different disciplines, takes all the available scientific data into account, listens to all the views and hypotheses expressed by the experts, and issues opinions, conclusions and/or recommendations that are all made public. Several hundred independent scientists from major national and international research organisations contribute as experts to the assessments carried out by ANSES.
OUR LABORATORIES, A STRONG AND DYNAMIC PRESENCE ROOTED IN LOCAL COMMUNITIES

Participation in the DIM 1Health project supported by the Île-de-France region

The Île-de-France region encourages themes that promote innovation, excellence and scientific attractiveness by funding large-scale projects. It has certified 13 fields of major interest (DIM) for the period 2017-2020, including infectious diseases within the “One Health” framework, with three themes: monitoring and anticipating the emergence of infectious diseases; preventing and treating infectious diseases; building and implementing suitable information programmes for different populations. ANSES is taking part in the DIM 1Health project led by Inserm. On 27 and 28 June 2018, the first scientific event of the “One Health & Infectious Diseases Symposium” project was held at the French Alternative Energies and Atomic Energy Commission. Jointly organised with Infectious Disease Models for Innovative Therapies (IDMIT), the conference brought together 160 participants, including project leaders from DIM 1Health and international experts on the theme of “One world, one health” to discuss topics related to the environment, transmission and pathophysiology, vaccines and innovative treatments.

The Laboratory for Food Safety, partner of the MARCO State-Region plan contract (CPER)

Supported by the plan contract between the State and the Hauts-de-France region, the purpose of the MARCO project is to carry out “Marine and coastal research in Côte d’Opale: from environments to resources, uses and quality of aquatic products”. MARCO is a multi-partner project applying a unique and innovative approach to the study of the marine environment, as part of a regional dynamic integrating the environmental impact to achieve suitable management of marine resources in line with the quality and safety of aquatic products for the consumer. ANSES is responsible for scientific co-ordination and is particularly involved in the “Quality and safety of aquatic resources” theme.

A new building dedicated to improving poultry farming conditions

While offering rearing conditions similar to those in the field, this new 1,400 m² building on the Beaucemaine site will enable the teams of the Ploufragan-Plouzané-Niort Laboratory to determine the rearing conditions that ensure optimal welfare and health of broilers, through a number of innovations. Six independent rooms with a total of 48 compartments are connected to a data management and monitoring system enabling precise control of food and beverage distribution, ventilation and heating for each livestock room, low-energy electric lighting and exterior shutters, as well as the opening of hatches providing access to a sheltered outdoor run. The continuous recording of all the data generated by the various probes installed (measuring food and water, air and temperature, with automatic weighing of chicks) will allow precise monitoring of animal behaviour and determine the best rearing conditions to meet their needs. This project enables ANSES to study the impact of different animal husbandry systems and practices on animal welfare, health, productivity and product quality, but also on the health of consumers and farm workers. It is fully in line with the “One Health and One Welfare” concepts.
ANSES’s objective is to maintain the conditions for trust in all its scientific output. This is essential to ensure that the Agency’s opinions are based on a scientific foundation that meets its requirements for independent, collegial, adversarial and multi-disciplinary expert appraisal.

The Agency’s credibility, and consequently its ability to provide effective support for public decision-making, rests on the plurality of data sources and strict compliance with shared rules of scientific integrity and ethics.

In 2018, ANSES pursued and further developed its approach in this area. It appointed a scientific integrity adviser and a whistleblower adviser for the Agency. It also revised its code of ethical standards in response to changes in the legal framework. ANSES supports its employees and the members of its expert groups in preventing conflicts of interest by implementing tools for this purpose.

Several documents were also published on the ANSES website: the 2017/2018 activity report of the ANSES Ethics Officer on the conditions of application by ANSES of the provisions on transparency and personal connections, as well as two opinions issued in 2018 by the Agency’s Committee for Ethical Standards.

SCIENTIFIC INTEGRITY AND ETHICS, THE CORNERSTONES OF ANSES

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REVISION OF THE AGENCY’S CODE OF ETHICAL STANDARDS

The description of the code of ethical standards has been revised to highlight the fact that it is not only applicable to the Agency’s expert appraisal mission, but to all its missions: risk assessment, reference, research, expert appraisal, scientific support, monitoring, alert, vigilance, management and monitoring of marketing authorisations for veterinary medicinal products, biocidal products, plant protection products, fertilisers and growing media, and measures associated with risk management. This revision of the code should therefore encourage its adoption by all the Agency’s employees and occasional external contributors. It was approved by the Board of Administrators on 20 November 2018.

The code of ethical standards now refers to the entire system implemented at ANSES:

- the analysis guide used to examine public declarations of interest;
- the roles created at ANSES: Ethics Officer, Ethics Adviser, Whistleblower Adviser, Scientific Integrity Adviser;
- the right of ANSES employees and external contributors to alert the Agency, and the Agency’s missions in this area;
- the National Charter for Research Integrity and the National Charter for Expertise to which ANSES has signed up; the rules in situations of multiple activities and when leaving to work in the private sector.
OPENNESS AND DIALOGUE WITH SOCIETY, KEY AGENCY VALUES

Dialogue committees
The Agency has set up three thematic dialogue bodies on controversial topics or issues being debated in society where it believes it essential to explain its missions and work to stakeholders and encourage discussion. Dialogue committees have therefore been set up on “Radiofrequencies and health”, “Nanomaterials and health” and, more recently, the “Platform for dialogue on plant protection products”. Six meetings were held in 2018. They provided an opportunity to discuss topics that resonate strongly in society, such as electromagnetic sensitivity, questions relating to titanium dioxide, or the effects of the ban on neonicotinoids in relation to the Agency’s work on possible alternatives. The expectations expressed by the participants in these bodies can lead to specific measures, as was the case with the Platform for dialogue on plant protection products: training was offered on the use of the E-Phy site (the catalogue of plant protection products and their uses, fertilisers and growing media authorised in France), which improved the ability of some organisations to access and exploit information from this database.

For the sixth time, ANSES also organised a training day for the association Women Engage for a Common Future, attended by 62 facilitators of the “Nesting” and “MA maison, MA santé” workshops, during which it presented some of its work.

Thematic steering committees
In accordance with the principle of openness to society, ANSES has set up five thematic steering committees (COT) since its creation in 2010, representing ANSES’s five sectors of activity, namely environment, food, work, animal health & welfare, and plant protection.

These advisory bodies are forums for dialogue and exchange with the Agency’s stakeholders and are designed to support the Board of Administrators in defining policy orientations and the work programme, and determining needs in risk assessment and research.

The committees, which bring together associations, professionals, industry, trade unions, agricultural unions, etc., also participate in promoting and disseminating ANSES’s work. They met in May 2018 to review the Agency’s activities, discuss the outlook and gather expectations on its five main areas of expertise. In October 2018, the five COTs were invited to an inter-committee...
meeting where the Agency’s draft annual work programme was presented, providing an opportunity to collect and share their comments and suggestions.

OUR CONTRIBUTION TO PARLIAMENT’S WORK AND PUBLIC DEBATE
ANSES’s scope and missions make it an integral part of citizens’ everyday lives and are closely tied to parliamentary work, which it can sometimes even initiate (for example, following its study on synthetic playground surfaces). The Agency is regularly consulted by French and European elected officials through hearings or meetings, and provides scientific and technical support in the drafting of laws and public policies by making its expertise available to parliamentarians and by providing reviews of scientific knowledge on issues within its field of competence. In 2018, the Agency took part in more than 70 parliamentary meetings, including 40 hearings.

ANSES was interviewed by various national (lessons from the Lactalis case, industrial food and occupational diseases in industry) and European (European Parliament’s Special “PEST” Committee on the authorisation procedure for pesticides in the EU) investigation committees as part of fact-finding missions (on herbalism, water quality) or for draft or proposed laws in the areas of food, plant protection products (creation of a fund to compensate victims of these products), or preparation for the finance bill. The Agency was also interviewed by the chairs of various parliamentary committees (social affairs, economic affairs, sustainable development) and delegations (overseas territories, future-oriented) of the National Assembly and the Senate. These hearings provided an opportunity to take stock of a particular subject or to contribute findings from ANSES’s work. They focused in particular on chlordane pollution, ANSES’s recommendations on sugar intake, the level of transposition of European regulations, and future investment projects.

Lastly, ANSES contributed to the work of the French Parliamentary Office for Assessing Scientific and Technological Choices (OPECST). It worked on its briefing notes, for example on palm oil, and took part in some of its public hearings, for example on the role of scientific expert appraisal or the health effects of the deployment of 5G technology.

ANSES, AN INTEGRAL PART OF THE EUROPEAN AND INTERNATIONAL INSTITUTIONAL LANDSCAPES
Protection of public health cannot be addressed solely at national level. ANSES’s presence in the European and international arenas fosters better prevention and control of risks. It responds to a dual challenge: firstly, to keep abreast as far as possible of all available data and knowledge in order to optimise prevention and control of health risks, and secondly, to be an influential force with respect to international scientific trends and approaches. ANSES therefore maintains close relations with its counterparts and plays an active role in the international scientific community. ANSES takes the European and international dimensions into account in all its activities. This helps ensure the effectiveness of its surveillance, expert appraisal, reference and research activities, and its ability to anticipate emerging risks. Moreover, promotion of its work benefits from information exchange networks and the participation of its staff in the work of other agencies. The Agency also makes a major contribution to standardisation activities and provides expertise to the authorities by participating in some of the work of the Organisation for Economic Cooperation and Development (OECD), the World Organisation for Animal Health (OIE), the European and Mediterranean Plant Protection Organisation (EPPO), the UN Food and Agriculture Organisation (FAO) and the World Health Organisation (WHO).

Lastly, through its position as “national network leader”, the Agency helps strengthen France’s European and international cooperation and mobilise and promote national expertise, in particular as the focal point in France of the European Food Safety Authority (EFSA) and as the OIE collaborating centre for veterinary medicinal products.

In addition, ANSES regularly meets with the European authorities. The Agency held discussions with Vytenis Andriukaitis, European Commissioner for Health and Food Safety, and Jean-Eric Paquet, the new Director General for Research and Innovation. ANSES also maintains relations with all European Union agencies sharing the same areas of competence. In general, ANSES maintains a close relationship with European Union agencies while ensuring the consistency and dissemination of information to other French authorities.

ANSES’S NETWORK ACTIVITIES
The ASK project “AMR in seafood as a common good for knowledge exchange and risk assessment” was launched in 2018, with the objective of sharing knowledge and expertise between partners on antimicrobial resistance in the previously under-explored seafood sector. This initiative, supported by funding from EFSA, will end in 2019. The network is being coordinated by ANSES and involves institutes from Norway, the United Kingdom, Denmark and Italy. ANSES is also involved in various other networks, such as I4HEALTH, “International cooperation for health”, a partnership agreement bringing together ANSES, the National Institute of Public Health and the Environment of the Netherlands (RIVM), the Norwegian Institute of Public Health (FHI) and Public Health England (PHE), or the ERA-ENVHEALTH network, bringing together 10 members to address environmental health issues.
On 11 June 2018, ANSES welcomed EFSA’s leaders to Maisons-Alfort to discuss the many topics of interest common to both agencies, in particular the current context of changes to the system for assessing risks in the food chain, and lessons learned on recent European crises such as fipronil. The assessment of plant protection products, especially glyphosate, and the contribution of social sciences to risk assessment and risk communication were also mentioned. Lastly, the French phytopharmacovigilance scheme, the only one of its kind in Europe, was an emerging topic of interest.

An ANSES delegation travelled to Helsinki on 18 June 2018 to meet the European Chemicals Agency (ECHA) and discuss the political and societal context in Europe today regarding the assessment of chemicals and proposals for developing this system. They also discussed new collaborations, particularly in the area of communication.
STRATEGIC NATIONAL SCIENTIFIC PARTNERSHIPS

ANSES is an integral part of the national research landscape and carries out its work in partnership with major players. The five multi-year agreements signed in 2018 reflect shared objectives in health and safety.

With CEA Tech

The French Alternative Energies and Atomic Energy Commission (CEA) and ANSES have been working together for several years on research aimed at improving the detection and characterisation of pathogens and physical and chemical contaminants, particularly to combat the biological and chemical terrorist threat in France. In view of the synergies in their missions, the organisations decided to pool their expertise by signing a framework partnership agreement to develop technological innovation and tools to improve responsiveness in the fields of animal and plant health and food safety.

With GDS France

Partners since 2013, ANSES and the French Federation of Health Protection Groups (GDS France) decided to strengthen the analytical reference scheme for Category 2 and 3 animal health hazards, which represent major economic challenges for French livestock farming in particular, and to ensure that this scheme can be adapted to address new health issues. This partnership is a major asset in epidemiological surveillance for animal health. Its renewal and the active involvement of the Nouvelle-Aquitaine region reinforce the ANSES Laboratory’s position as a centre of innovation in animal health.

With INRA

ANSES and the National Institute for Agricultural Research (INRA) renewed their framework partnership agreement for five years, thus strengthening their numerous existing collaborations in the fields of animal health and welfare, plant health and plant protection, food and nutrition, ecotoxicology and environmental quality. This partnership covers a broad range of topics, such as the preservation of diversity and the development of biological resources; the reduction in the use of antibiotics in livestock farming and plant protection products in agriculture, agro-ecological alternatives; animal welfare; occupational health and safety; easier access to public data on surveys of consumption or exposure to environmental contaminants, contamination of soil and crops, food, livestock, products and the environment, and the nutritional composition of food and feed; the impact of biological and chemical contaminants on the environment or target organisms, and vigilance schemes contributing to risk assessment; pathogens and their vectors, methods for epidemiological surveillance, in the context of animal and plant health and human food safety.

With Ifremer

In view of the complementary nature of their missions and activities in epidemiological surveillance of shellfish and fish and relating to consumer safety, ANSES and the French Research Institute for Exploitation of the Sea (Ifremer) decided to develop their cooperation in order to improve coordination of research programmes and expert appraisal work, as well as to share skills and resources on common themes with high health implications: chemical and microbiological contaminants of fishery products, the health of fish and molluscs, marine biotoxins, microplastics, and aquatic bacteria, parasites or viruses of interest in public health.

With the National Office for Hunting and Wildlife

ANSES and the National Office for Hunting and Wildlife (ONCFS) renewed their collaboration with a third framework partnership agreement. This shows that greater consideration is being given to wildlife in issues of animal and public health. This collaboration can be seen as a major contribution to public policies in these areas after recent outbreaks such as those of avian influenza or African swine fever. In addition to providing support for management of the brucellosis outbreak in ibex in the Bargy Massif, which demonstrated the complementarity of their approaches, the two institutes share other areas of major concern: bovine tuberculosis, avian influenza and swine fever.
ACQUIRING AND SHARING THE AVAILABLE SCIENTIFIC KNOWLEDGE ON HEALTH AND SAFETY ISSUES
The research conducted in the ANSES laboratories is the essential foundation for the risk assessment work carried out by the Agency. Through their missions of detecting emerging threats and developing new analytical methods, the ANSES laboratories contribute every day to the surveillance and control of health risks, whether these concern human food, animal health and welfare, or plant health. In addition to its scientific expertise in research, ANSES coordinates and supports research through funding for projects within the framework of the PNR EST. Lastly, promotion of scientific results and sharing of knowledge are an integral part of ANSES’s activities, bringing research communities together in support of scientific expertise.

LABORATORIES AT THE FOREFRONT OF RESEARCH ON HEALTH AND SAFETY ISSUES

Launch of the European EJP project on “One Health”, coordinated by ANSES

The European Joint Programme (EJP) on “One Health” was launched on 1 January 2018 and will run for five years. This programme is being coordinated by the Agency and concerns food safety and animal health. It involves teams from six laboratories (Maisons-Alfort, Lyon, Fougères, Nancy Hydrology and Ploufragan-Plouzané-Niort) and the ANSES headquarters. The EJP on “One Health” is designed to strengthen cooperation between 39 partners from 19 Member States. These research centres, most of which have reference mandates on foodborne zoonoses and some of which are also the health agencies in their countries, form an organised network and represent an integrated research community whose aim is to achieve significant advances in the areas of foodborne zoonoses, antimicrobial resistance and emerging zoonoses. It has a budget of €90 million, half of which is being funded by the European Union. The EJP on “One Health” will generate scientific data to be used as input for the analysis and assessment of health risks by national and European agencies. Through the coordination of this project, ANSES is helping to construct the European Research Area, at the heart of the “One Health” concept.

H2020 VALITEST project: validation of diagnostic tests for plant health

Coordinated by ANSES’s Plant Health Laboratory, this European project aims to improve the identification of plant pests by producing performance data for the available reagents and methods, harmonising validation processes and improving knowledge of the needs of the end users of these reagents and methods. The project was launched on 1 May 2018 and will run for three years. It brings several partners together in the consortium, including European laboratories and agencies as well as seven private organisations, for a budget of more than 3 million euros.

698
SCIENTIFIC PUBLICATIONS
INCLUDING
376
IN CATEGORY A AND A+
An inter-agency group to harmonise physiologically-based pharmacokinetic (PBPK) models

ANSES has joined forces with other agencies in Europe on the “kinetics” discipline, which studies the change over time of molecules within organisms. Kinetics links the external exposure dose to a substance (plant protection compound, veterinary drug, contaminant) with the internal concentration levels in the body of the exposed human or animal. This knowledge is key in the risk assessment process. For the first time, a meeting was organised with scientists from BfR, DTU-Food, RIVM and EFSA in late 2018 to discuss pharmacokinetic practices, approaches and tools, as well as future lines of action that should lead to collaborations. The workshop concluded with the establishment of an inter-agency group, which aims to improve efficiency and harmonisation in the use of PBPK models in risk assessment.

Completion of the European EFFORT project

The European project “Ecology from Farm to Fork of Antimicrobial Resistance Transmission” came to an end in late November 2018. The programme led to an epidemiological study on the relationships between antibiotic use, biosecurity and animal welfare and antimicrobial resistance observed in E. coli and in the intestinal microbiota of animals, using molecular methods (qPCR, metagenomics). The Fougères, Maisons-Alfort and Ploufragan-Plouzané-Niort laboratories contributed to studies in calves, turkeys and trout conducted under the same conditions in three countries. The project generated a set of high-quality original data and the main results were presented at the final conference in Utrecht (Netherlands).

Impact of global change on the emergence of plant diseases and pests in Europe

In conjunction with the European Food Safety Authority (EFSA) and the European and Mediterranean Plant Protection Organisation (EPPO), ANSES organised an international conference on the impact of global change on the emergence of plant diseases and pests in Europe. The conference was held in Paris on 23 and 24 April 2018. This event provided an opportunity to review the state of scientific knowledge in Europe and internationally on identifying the causes of emergence of plant diseases and pests, and their consequences on the environment.

Nosocomial infections: these can also be caused by the *Bacillus cereus* bacterium

Although *Bacillus cereus* is well known as a source of food infections, researchers from ANSES and INRA, working with doctors at nine French hospitals, have demonstrated for the first time that this bacterium is responsible for nosocomial contamination within and between hospitals. This study, conducted in 39 patients between 2008 and 2012, also found strains of *B. cereus* in the hospital environment capable of causing infections that can sometimes be fatal. These results, published in the journal PLOS ONE, suggest that more attention should be paid to these hospital infections, in order to improve patient care.

*Bacillus*

*B. Cereus* ranks as the second most common foodborne pathogenic bacterium, responsible for 10-15% of foodborne illness outbreaks since 2013. It can cause diarrhoea and vomiting, and its spores are resistant to cooking and pasteurisation.
CASDAR Caliso Project
This three-year project, which ended in 2018, involved six partners and was coordinated by the ANSES Plant Health Laboratory. It focused on the detection and epidemiology of *Candidatus Liberibacter solanacearum*, a bacterium transmitted to seeds that is responsible for plant disorders in the families Apiaceae and Solanaceae. Different methods for detecting the bacterium in different plant matrices were assessed. In the inter-laboratory validation test, which brought together 26 international partners, the real-time PCR amplification method obtained the best results in analytical sensitivity and reproducibility. Regarding the epidemiology of the bacterium, four new host plant species were identified in France: chervil, fennel, parsley and parsnip. Two haplotypes were characterised in France, only on plants from the Apiaceae family.

A partnership with EFSA to rank plant pests
EFSA was asked by the European Commission to collect and analyse information on harmful organisms of potential concern in the EU. The automated media and scientific literature monitoring exercise (“horizon scanning”) carried out generated a list of emerging pests. To identify the organisms of interest, these pests were prioritised through a partnership between EFSA and the Plant Health Laboratory, which capitalised on ANSES’s expertise and experience gained from carrying out this exercise at national level. The organisms identified will be subject to an in-depth risk analysis or suitable monitoring measures. Prior to this, an international inventory of the different pest ranking systems was produced, which helped identify good practices to be followed when designing these systems.

Deployment of genomics for health investigations
Throughout 2018, the Laboratory for Food Safety worked on the deployment of comparative genomics to investigate infectious episodes (food/humans), in order to respond to requests from the French Ministry of Agriculture and Food and Santé publique France (such as the case of *Salmonella Agona* and Lactalis), or from the European Commission and EFSA, in its role as the European Union’s Reference Laboratory for Listeria monocytogenes. It published several investigation reports, including one on frozen Hungarian corn, with the genetic analysis of 32 human strains and six food strains, confirming this product’s involvement in the European outbreak.

Campylobacter and source attribution
The consumption of poultry meat has long been considered as the main cause of foodborne campylobacteriosis in humans. ANSES carried out research on the complete genome of nearly...
a thousand Campylobacter strains isolated from different animal species and humans. It analysed the genetic diversity of a combination of 15 genes, which indicated the animal species from which these strains originated. This analysis carried out on strains isolated in 2009 and 2015 showed that the sources of Campylobacter in humans may in certain years come equally from cattle and poultry reservoirs. This research also highlighted the non-negligible role of environmental sources and pets in human exposure to Campylobacter. This is a first step in ANSES’s surveillance work based on complete genome analysis, which should become an essential tool for analysing the risks of a major source of foodborne diseases and could contribute to guiding public policies to control human campylobacteriosis.

Major scientific efforts on chlordecone
The exposure of the French Caribbean population to chlordecone, an insecticide active substance used massively in the past for banana cultivation, was headline news in 2018. A delegation from ANSES, led by its Director General, travelled to the Caribbean from 14 to 19 October 2018 to meet local stakeholders and participate in a scientific and information symposium on chlordecone pollution, during which ANSES presented its work on the topic (notably the Kannari study). The Laboratory for Food Safety also contributed to four separate projects on chlordecone in 2018: 1) a study investigating the distribution of this compound in the muscle/fat/liver of 200 cattle (Triplet study), which was extended to blood tests of the same cattle; the method will be submitted to COFRAC for accreditation 2) the MEDICHLORA thesis (on toxicokinetics of chlordecone in ewes) coordinated by the University of Lorraine and described in two scientific publications 3) the ongoing ANR project INSSICCA (INnovative Strategies to establish Safe livestock rearing systems In Chlordecone Contaminated Areas), also coordinated by the University of Lorraine 4) the impact of culinary processes on the fate of chlordecone and its metabolites in cooked meat.

The SMARTBEES project on the resistance of bees to infections and parasites
The SMARTBEES project “Sustainable Management of Resilient Bee populations”, which ended in 2018, sought to improve understanding of the natural resistance of bee populations to infectious and parasitic diseases by focusing on the Varroa destructor parasite and the pathogens it carries. The Sophia-Antipolis Laboratory was particularly involved in studying the diversity and virulence of the deformed wing virus (DWV), a pathogen transmitted by V. destructor. In this context, the diversity of DWV variants from different European countries was examined. The VDV-1 variant was mainly found in samples from France, the United Kingdom, Spain, Germany and Macedonia, while the DWV variant was more common in samples from Moldova, Italy and Romania. In order to better characterise the overall structure of viral genomes, some samples were analysed using new-generation sequencing. This approach helped distinguish more precisely the different viral variants and revealed several recombinant DWV/VDV-1 forms. Lastly, the pathogenicity of certain variants was tested on bees in the pupal stage.
Launch of the POSHBEE project, aimed at quantifying the pesticide hazard for bees

The POSHBEE project "Pan-European Assessment, Monitoring, and Mitigation of Stressors on the Health of Bees", initiated in June 2018 for a period of five years, aims to significantly and sustainably improve bee colony health and pollination services in Europe. It brings together 42 partners and will provide the first European-level quantification of the hazard posed by pesticides to honeybees and wild bees. The project will determine how food and pesticides, alone or in mixtures and associated with parasitic and infectious agents, impact bee health. It will also respond to the demand for innovative monitoring tools and protocols. The results of research related to environmental protection policies and practices will be made available directly to local, national and European stakeholders. ANSES is in charge of the work package on assessing bees’ exposure to various stressors. The analyses will cover detection of chemical contaminant residues, identification and quantification of parasitic and infectious agents affecting bees, and determination of the nutritional quality of their food resources (pollen and nectar).

An analysis framework for water quality monitoring

The Nancy Laboratory for Hydrology published a new reference framework for water quality monitoring. It was developed in partnership with the Directorate General for Health and in consultation with the various water testing stakeholders, in order to provide the technical clarifications needed for the implementation of water quality monitoring. This framework, which specifies the conditions of implementation of the Ministerial Order of 19 October 2017 on the analytical methods that can be used in water quality monitoring, applies to the analysis of water intended for human consumption, recreational water, natural mineral water and domestic hot water. It also clarifies the Ministerial Order of 5 July 2016 on the conditions of laboratory accreditation for water quality monitoring. This framework, which will be updated regularly, is a key document alongside the regulatory requirements and normative documents.
What do you mean by reference?

Gilles Salvat: Reference is what ensures an efficient and responsive system for protecting health. The work of the reference laboratories is vital to improving knowledge, identification and surveillance of the major hazards we face in food safety, animal health and plant health. On a routine basis, the national and European reference laboratories develop analytical methods, disseminate them to a network of accredited field laboratories, and then verify their ability to implement these analytical methods. The reference laboratories therefore ensure the dissemination of effective analytical methods that enable a prompt response in the event of a health crisis. The development of effective methods ensures that the public authorities are always quick to react during the emergence or resurgence of pathogens.

What is the role of the reference laboratories in the event of a health crisis?

Gilles Salvat: The reference laboratories are often on the front line during health crises. Because they can rapidly detect emerging pathogens, they provide scientific and technical support that enables risk managers to take appropriate measures.

Two recent health crises illustrated the importance of our reference mandates, both in France and at European level.

During episodes of avian influenza, ANSES’s Ploufragan Laboratory, which holds the national reference mandate for this disease, was able to determine whether the virus strains involved were slightly or highly pathogenic, and whether or not they had zoonotic potential. The results of its analyses enabled the Ministry of Agriculture to take appropriate management measures. As the European Union Reference Laboratory for Listeria, ANSES’s Laboratory for Food Safety conducted analyses on a strain of Listeria monocytogenes that has been affecting five Member States of the EU (Austria, Denmark, Finland, Sweden and the United Kingdom) since 2015. These analyses helped trace the origin of this strain to frozen corn that was probably produced in Hungary and packaged in Poland. In this case, the scientific support provided by ANSES’s Laboratory proved invaluable for the management of this health crisis by the European Food Safety Authority (EFSA).

In what ways are research and reference linked in the Agency’s activities?

Gilles Salvat: The reference activities are a further asset for the Agency’s health and safety missions. One of the fundamental roles of ANSES’s laboratories is to anticipate the human health consequences of exposure to biological, physical or chemical agents, whether these are related to animal or plant diseases, or food or environmental contamination. It complements the research activities carried out by the scientific teams, as the reference work is part of a continuous process calling on the same skills, the ultimate objective being to understand, monitor and prevent the phenomena by which food, animals or plants become contaminated. Our research fosters the development of increasingly effective analytical methods, and our reference and surveillance activities contribute to the establishment of biological collections that are essential to research and risk assessment. For example, the Salmonella network helped detect the potential emergence of *Salmonella Kentucky CipR*, which is highly resistant to ciprofloxacin, and provided public policy-makers with insights on how to halt its spread.

At Agency level, the reference activities also provide input for the risk assessments carried out by our expert groups. ANSES’s reference laboratories make the data and results they produce available to the experts responsible for risk assessment. The close links between research, reference and risk assessment therefore ensure development of the most suitable tools for monitoring these pathogens. This in turn enables ANSES to address health issues with a comprehensive, cross-cutting approach, and to constantly improve its anticipation of risks. This ultimately strengthens the quality of the system for safeguarding consumer health.
OPENNESS TO PARTICIPATORY SCIENCE

Citizen observation of the giant ragweed plant

With a view to encouraging citizen science, the Agency has joined forces with an initiative to help identify the locations where the giant ragweed is established using data collected by members of the public. This operation, led by Tela Botanica (a network of French-speaking botanists), consists in mobilising the public to obtain field data by offering a tool for collecting observations and sharing them online. This tool explains in simple terms how to identify the plant in situ and can then transmit the information collected in the field. The data will be integrated into the Nature and Landscape Information System (SINP) and added to the database of ragweed reports.

A Smartphone application to prevent the risk of Lyme disease

Especially active in the spring and autumn, ticks remain the most common vectors of pathogens responsible for infectious diseases in Europe. The main human disease associated with ticks in France is Lyme disease, caused by a bacterium belonging to the species *Borrelia burgdorferi*. Without treatment, the disease can cause skin, muscle, neurological and joint disorders that can be highly disabling. As part of the CiTIQUE research project, researchers from ANSES, INRA and the Alfort National Veterinary School developed the Signalement-Tique website and smartphone app in collaboration with the Ministry of Health and the *Borrelia* National Reference Centre in Strasbourg. This app enables walkers to report tick bites and receive advice if bitten. Using this application and the reports received, maps of tick populations can be drawn up to help implement targeted preventive measures. Thanks to the joint efforts of citizens and researchers, the data collected will also further our knowledge in order to improve understanding and prevention of Lyme disease and other diseases caused by tick-borne pathogens.

TWO NEW REFERENCE MANDATES

Foot-and-mouth disease: a new European Union reference mandate for ANSES and Sciensano

ANSES and its Belgian counterpart Sciensano, respectively through the Maisons-Alfort Laboratory for Animal Health and the Veterinary and Agrochemical Research Centre (CERVA), were jointly appointed European Union Reference Laboratory (EURL) for foot-and-mouth disease. This French-Belgian consortium, coordinated by ANSES, was selected following a call for applications issued by the European Commission in May 2017, with a view to replacing the previous incumbent, the Pirbright Institute in the United Kingdom. Through this decision, which takes effect on 1 January 2019, the European Union is paying tribute to the commitment of both establishments to animal health, and to the quality of their research work.

Viruses in food: a new national reference mandate for the Laboratory for Food Safety

ANSES’s Laboratory for Food Safety in Maisons-Alfort was appointed National Reference Laboratory for the detection of “foodborne viruses in foodstuffs of animal origin excluding shellfish”. Since 2003, the Laboratory, which specialises in contaminants found in foodstuffs, has been developing methods to detect these viruses in the main at-risk foods, enabling it to play a part in European standardisation work. This new mandate, which is a major step forward in strengthening public health regarding foodborne viruses, adds to the 13 national and two European mandates already held by the ANSES Laboratory.
43 projects selected and 7.4 million euros mobilised for calls for projects in 2018

Each year as part of the National Research Programme for Environmental and Occupational Health (PNR EST), the Agency issues calls for projects, essential tools for developing scientific knowledge with which to support public policy-making and health risk assessment work in its field of competence. This year, an additional budget from the Ministry of the Environment provided support for projects on the topic of endocrine disruptors.

In 2018, 350 projects were submitted in response to the two calls for projects, an unprecedented number for the PNR EST. After a rigorous selection process based on the assessments of a scientific committee and independent external assessments, 43 projects were selected: ANSES will fund 37 projects from the budgets delegated by the Ministries of Environment and Labour (€4.71M), two projects will be supported by the Aviesan ITMO Cancer (€0.36M) as part of the Cancer Plan, two projects will be funded under the EcoPhyto Plan (€0.25M) in conjunction with the French Agency for Biodiversity, and two others by the Environment & Energy Management Agency (ADEME) (€0.40M). In addition, ANSES will finance nine projects on the theme of “radiofrequencies and health” using the proceeds from the tax on radiofrequency transmitters (€1.67M).

The research projects selected in 2018 relate to one or more types of environmental exposure, in particular: 23 projects relate to chemical agents, 13 of these are specifically on endocrine disruptors, supported by a specific budget, and two are on plant protection products;

- ten concern physical agents: nine on radiofrequencies and one on exposure to low-frequency magnetic fields;
- three projects are on nanoparticles;
- three projects focus on biological agents, including one on vector control;
- five projects are devoted to the theme of air, two of which are related to climate change;
- five projects concern emerging issues, including two on microplastics.

In order to capitalise on the funded projects and share the scientific knowledge acquired, each year ANSES organises Scientific Conferences enabling the research teams to present their projects to stakeholders from the voluntary and professional sectors, scientists, public institutions, etc. For the first time, ANSES has joined forces with its research partners to develop exchanges and synergies. Two scientific symposia were organised:

- “Cancer and the Environment”, in partnership with the ITMO Cancer institute of the National Alliance for Life Sciences and Health (Aviesan) and the National Cancer Institute (INCa);
- “Occupational health” in partnership with the National Research Agency (ANR).
Despite medical advances, cancer remains the leading cause of death in France. While active smoking, alcohol consumption and an unbalanced diet continue to be the main causes of cancer mortality, the environment has a real impact on the risk of cancer, although it remains difficult to assess. Environmental factors play an important role in chronic diseases, including cancer. For example, according to WHO estimates, air pollution is responsible for one in six deaths worldwide, and 19% of cancers are due to environmental factors. Some carcinogens are now well known, such as asbestos, radon, cadmium, arsenic, airborne particles, ultraviolet rays and certain chemical pollutants. Others, such as certain pesticides or nanoparticles, are still undergoing studies and research. One of the challenges in environmental health research is to establish causal links between certain cancers and exposure to chemical, physical or biological agents, on the basis of sound scientific knowledge. The methodological obstacles to be overcome are often related to difficulties measuring exposure, particularly low doses, and the sometimes very lengthy time lags between exposure and onset of the disease. Assessing combined exposure – to several chemicals, for example – and the associated risks is a real scientific challenge. Many research programmes are currently examining this future challenge, as well as the question of the “exposome”, i.e. the totality of exposure to which an individual is subjected during their lifetime, regardless of the origin.

Work-related cancers are also probably underestimated, as evidenced by the gap between data on occupational disease recognition and the estimated annual number of cancer cases (several thousand) in France. The data collected as part of the National Network for the Monitoring and Prevention of Occupational Diseases (RNV3P), which ANSES coordinates, tell us more about the industry sectors and occupations posing the greatest risk, but can also highlight new exposure situations or hazardous occupations. Thus, asbestos is incriminated in 42% of the cases of work-related cancers recorded by the RNV3P, far ahead of polycyclic aromatic hydrocarbons (6.5% of cases). These cancers mainly affect people in metalworking and mechanical engineering occupations, or in construction.

ANSES manages the funding for occupational health and environmental health research projects, to support advances in scientific knowledge in these areas. Each year, 6 to 8 million euros are mobilised as part of the National Research Programme on Environmental and Occupational Health. They also help to explore new avenues of research to prevent work-related or environmental cancers, one of the priorities of national cancer plans. To meet these challenges, ANSES works closely with research players such as Aviesan and the National Cancer Institute (INCa), in order to develop synergies in the fight against cancer.

**What action is ANSES taking on these topics?**

**What about cancer related to occupational exposure?**

**Cancer and the environment, what are the research challenges?**

**“THE ENVIRONMENT HAS A REAL IMPACT ON THE RISK OF CANCER, ALTHOUGH IT REMAINS DIFFICULT TO ASSESS”**

Prof Gérard Lasfargues, Managing Director General of the Science for Expertise Division

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**Focus on “Cancer and the environment” Cahiers de la Recherche**

**ACQUIRING AND SHARING THE AVAILABLE SCIENTIFIC KNOWLEDGE ON HEALTH AND SAFETY ISSUES**

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SCIENTIFIC EXPERTISE FOR ASSESSING RISKS WITH REGARD TO HEALTH ISSUES
ANSES’s role is to provide insight for public policy-making through independent scientific expert appraisals based on the best available scientific knowledge. Confronted with scientific uncertainties, societal controversies, the emergence of new risks (development of technologies, placing on the market of new products, developments in the world of work, climate change, etc.) and the problem of cumulative exposure, the Agency conducted numerous expert assessments in 2018 to meet ever-growing expectations and requirements.

PLANT HEALTH

Combating the red palm weevil
ANSES conducted an expert appraisal to identify better strategies to control the red palm weevil *Rhynchophorus ferrugineus*, particularly in the French Mediterranean area where palm trees are in danger of disappearing. The Agency defined two different situations for controlling this pest in France. In the “Central-Atlantic” area, weevil eradication is possible through the use of preventive plant health measures such as regulatory action combined with surveillance and monitoring of palm trees, as well as mechanical sanitation and chemical or biological protection methods. In the “Mediterranean” area, where weevil eradication is virtually impossible, the objective is to stabilise the weevil’s spread in order to reduce its impact on palm tree mortality. By identifying the most effective operational methods and taking into account the cost of their implementation and their possible impact on the environment, ANSES was able to propose two different scenarios for controlling the red palm weevil in the Mediterranean area: stabilising the red palm weevil population and limiting its geographical range through appropriate control measures; giving priority to protecting palm trees of heritage significance in infested areas and proposing alternative plant species for unprotected areas.

ANIMAL HEALTH AND WELFARE

ANSES proposes a definition of animal welfare
Relying on philosophical, social and legal interpretations of the concept of animal welfare, the Agency’s Opinion proposed a definition of animal welfare taking into account changes in scientific knowledge and summarised expert analyses of the methods required for its assessment. The Opinion listed several assessment matrices aiming to establish objective conditions for animal welfare and encouraged the development of specific tools depending on the species, development stage and environment of the animals. It provides an essential framework for the Agency’s future research and expert appraisal work, which will serve as a basis for subsequent Opinions in this area.

The welfare of an animal is its positive mental and physical state related to the fulfilment of its physiological and behavioural needs and its expectations. This state varies depending on the animal’s perception of the situation.
Assessing alternatives to antibiotics in animal husbandry

The Agency conducted a review of alternatives to antibiotics with a view to reducing their use in livestock. The expert appraisal led to development of an original method for assessing the diverse scientific publications in this field. In its report, the Agency identified numerous products and substances including compounds, plants, plant extracts and micro-organisms, which are used as alternatives to antibiotics. However, it emphasised the diversity of the data available to assess their safety, efficacy and ability to select resistant bacteria. ANSES stressed the need to initiate a debate to define, for the main animal production sectors affected, the classes of alternatives that should be given priority for in-depth research to remove uncertainties as to their efficacy and safety. Lastly, ANSES recommended raising the legal status of these products at European level as part of the plan to tackle antibiotic resistance.

HEALTH AND NUTRITION

Consumption of wild game: reduce exposure to chemical contaminants, particularly lead

Game can be contaminated by numerous chemicals found in its living environment or via ammunition. The Agency assessed the health risks associated with the consumption of wild game in view of the environmental chemical contaminants (dioxins, PCBs, cadmium and lead), whether the game is wild or farmed. The Agency recommended documenting more fully the contamination levels of small and large wild game, as well as the dietary exposure of game consumers. Because the expert appraisal highlighted a health concern related to lead, the Agency proposed various levers for action to reduce consumer exposure: substitution of lead ammunition, trimming of meat, limiting the frequency of consumption. Pending additional data and given the level of lead contamination in large wild game, the Agency recommended that women of childbearing age and children avoid all consumption of large wild game, while other consumers should limit themselves to occasional consumption, around three times a year.

Seaweed consumption and the risk of excess iodine intake

Over the last few years, seaweed has become increasingly common on our plates. Fresh, dried or as a food supplement, its iodine content varies and can sometimes be high. ANSES assessed the risk of excess iodine intake from the consumption of seaweed-based products. In view of the non-negligible risk of exceeding the upper intake levels for iodine, the Agency advised against the consumption of seaweed and seaweed-based food supplements by certain at-risk populations, and recommended that regular consumers remain vigilant.

ANSES launched a database of more than 500 toxicity reference values

Since 2004, the Agency has been implementing a national programme on toxicity reference values (TRVs). TRVs are biological indicators used to qualify or quantify, on a scientific basis, a risk to human health associated with exposure to a chemical substance. They are useful for the various players involved in risk governance: companies, public expert appraisal bodies and authorities tasked with risk management. ANSES published a database of more than 500 TRVs, including those it has established itself (around 60, for nearly 40 substances) and those by other organisations, which it uses to conduct its expert appraisal work.
ENVIRONMENTAL HEALTH

Synthetic sports pitches: a health risk of little concern
In recent years, the increasing use of tyre granulates for sports pitches and playgrounds has raised concerns about their potential impact on health and the environment. ANSES analysed the studies and expert assessments currently available on this topic. It concluded that the health risks are of little concern, but pointed to potential risks to the environment. However, ANSES highlighted uncertainties related to methodological limitations and a lack of data. It therefore proposed some priority themes for research to consolidate the data and supplement the risk assessments already available in European and internationally, in particular concerning playgrounds for children likely to use the same aggregates.

Assessment of the safety of feminine hygiene products
ANSES conducted a risk assessment on the safety of feminine hygiene products. Chemicals have been identified in these products at very low concentrations not exceeding health thresholds. The expert appraisal did not reveal any risk associated with these substances. Nevertheless, the Agency recommended that manufacturers improve the quality of these products in order to eliminate or minimise the presence of chemicals. ANSES’s expert appraisal also looked into menstrual toxic shock syndrome. Its work showed that the risk of developing this syndrome, which is due to a bacterial toxin, is related to the conditions of use of the feminine hygiene products. ANSES therefore reminded users of the importance of complying with the hygiene rules associated with the use of sanitary products, particularly the length of time that tampons and menstrual cups can be worn.

Footwear and textile clothing: risks of skin allergies and irritation
Cases of skin allergies and irritation related to clothing or footwear are regularly reported to the health authorities. ANSES’s expert appraisal identified the chemicals likely to be found in these articles and possibly responsible for these cases, and led to recommendations on how to better protect consumers. As part of this expert appraisal, ANSES set up a ground-breaking biomedical study in France to investigate cases of skin allergy or intolerance. To do this, it mobilised a network of physicians (dermatologist-allergists, toxicologists, etc.) and performed tests on the articles worn by the patients and suspected of being associated with skin reactions, in order to characterise the chemical substances found in these articles.

Sunbeds: a proven risk of skin cancer
The health risks associated with exposure to artificial ultraviolet radiation from sunbeds have been well established for many years now. In its Opinion, ANSES pointed out that recent data on the subject support previous assessments: there is a proven cancer risk associated with ultraviolet radiation from artificial tanning equipment. The Agency therefore recommended that public authorities take the necessary steps to prevent people from being exposed to such radiation for cosmetic purposes.
Hypersensitivity to electromagnetic waves
ANSES’s expert appraisal revealed the great complexity of the issue of electrohypersensitivity, while concluding that according to the current state of knowledge, there is no solid experimental evidence establishing a causal link between exposure to electromagnetic fields and the symptoms described by the people declaring themselves as electrohypersensitive. The Agency also emphasised that the suffering and pain expressed by the people declaring themselves as EHS is a reality of life, requiring them to adapt their daily lives to cope with it. In view of these results, the Agency recommended providing suitable care for the people concerned and pursuing research work, in particular by setting up studies whose experimental conditions take into account the circumstances of people declaring themselves as electrohypersensitive.

Effects of climate change in the workplace
Adopting a future-oriented expert appraisal approach that looked ahead to 2050, ANSES sought to characterise the interactions between the climate, the environment and occupational health in order to identify the occupational risks potentially increased by climate change. It highlighted the fact that all occupational risks are and will be affected by changes to the climate and environment, with the exception of those associated with noise and artificial radiation. The main causes are rising temperatures, an alteration of the biological and chemical environment, and a change in the frequency and intensity of certain climate hazards. ANSES recommended encouraging all the parties concerned to immediately start integrating the climate change impacts that are already perceptible, or that can be anticipated, in their occupational risk assessment approaches, in order to deploy suitable preventive measures.

OCCUPATIONAL HEALTH
Consideration of multiple exposure
Depending on their occupations, workers may be exposed to multiple health risk factors (chemical, biological or physical hazards) through various routes such as inhalation, ingestion or skin contact. This exposure, combined with psychosocial risk factors related to issues of work organisation and management, can lead to the occurrence of short- or long-term diseases and make working conditions more difficult. The question of multiple exposure is therefore a major challenge for all those active in the field of occupational health, safety and prevention. As part of the 2016-2020 National Occupational Health Plan, ANSES and various partners carried out a review of the measures taken on this subject in France and at European and international level. This work has helped determine the state of knowledge and the issues surrounding this problem.
AIR QUALITY

A list of new priority pollutants for air quality monitoring

The European monitoring strategy for air quality relies heavily on quality standards for a number of pollutants. Advances in knowledge on the toxicity of substances and their emissions in the atmosphere have shown that certain pollutants that may have an impact on human health are not currently taken into account in regulatory monitoring. ANSES received a formal request from the Ministries of Ecology and Health to propose a list of new priority pollutants for this air quality monitoring, to supplement those already monitored. The Agency recommended conducting national surveillance of 1,3-butadiene and supplementing the acquisition of data on ultrafine particles and carbon black. It also recommended creating a national data bank of existing measurements for pollutants that are not currently regulated but are found in ambient air. The results of this expert appraisal will also provide input for the discussions launched with a view to the revision of Directive 2008/50/EC on air quality monitoring initiated by the European Commission in July 2017.

Effectiveness of “anti-pollution” masks

Prevention of ambient air pollution is now a real public health issue. Since questions are regularly asked about the value of recommending that the population wear personal protective equipment, ANSES assessed the potential health benefits of wearing “anti-pollution” masks. Its expert appraisal revealed a lack of data demonstrating a health benefit. To reduce the health impacts associated with ambient air pollution, the Agency reiterates the importance of prioritising action at the source by limiting pollutant emissions. It also recommended providing better information for the population, especially for susceptible individuals, on the behaviour to be adopted to limit daily exposure to air pollution.

Launch of the national exploratory measurement campaign for pesticide residues in air

ANSES, INERIS (as a member of the Central Laboratory for Air Quality Monitoring - LCSQA) and the network of approved air quality monitoring associations (AASQAs) coordinated by ATMO France launched a campaign to measure pesticide residues in air. This first national campaign aims to improve knowledge on the pesticides found in ambient air and thus gain a better understanding of the exposure of the French population. This one-year exploratory campaign will ultimately be used to define a surveillance strategy for pesticides in air. It includes the analysis of around 80 substances at 50 different measurement sites in metropolitan France and the overseas territories, leading to a total of around 1500 samples over the duration of the campaign.
FOCUS ON WORK CARRIED OUT FOR ALERTS

Succinate dehydrogenase inhibitor fungicides used in agriculture

Succinate dehydrogenase inhibitors (SDHIs) are active substances used in fungicidal products to control certain fungi and moulds affecting crops. SDHIs prevent their development by blocking an enzyme involved in cell respiration: succinate dehydrogenase. Following an alert raised by several scientists on the potential health risks of using SDHIs in agriculture, ANSES set up a dedicated group of independent experts to examine the hypotheses put forward by these scientists and determine whether they constituted a health alert. In particular, this expert group interviewed the researchers raising the alert in order to obtain the information they possessed. The Agency also promptly forwarded this information to all the European competent authorities.

Agenesis

On 29 October 2018, the Ministries of Health, Ecological Transition and Agriculture asked ANSES and Santé publique France to investigate the causes, particularly any environmental causes, of clustered cases of transverse agenesis of the upper limbs in the départements of Ain, Morbihan and Loire-Atlantique. In practice, a multi-level system was proposed.

- An expert committee made up of leading scientists, as well as the ANSM, Santé publique France and the IRSN, was set up. Its role will be to consider all the hypotheses, clarify the issues in terms of expert appraisal and research and, in view of the findings, formulate recommendations.

- A steering and information committee involving health professionals, regional health agencies and victims’ associations will enable expectations and points of disagreement or misunderstanding to be expressed, the results obtained to be questioned, and the quality of the scientific results produced by integrating local knowledge to be improved. It will be continually informed of the progress made in identifying hypotheses, the questions asked, the data used and the methodologies applied in the expert assessments carried out.

ANSES also took the initiative to launch investigations through the Epidemiological Surveillance Platform for Animal Health and an exhaustive analysis of the scientific literature on dietary or environmental exposure that could be responsible for agenesis phenomena.

WORK IN THE SOCIAL SCIENCES

Reporting to the Science for Expertise Division, the Social Sciences, Expertise and Society Unit manages cross-cutting activities within the Agency. It develops and coordinates the mobilisation of the social sciences to make a valuable contribution to ANSES’s work. It also fosters and strengthens interactions with stakeholders (citizen groups, trade unions, business federations, etc.).

A dozen expert working groups call on skills in the social sciences, the disciplines concerned depending on the purpose of the request and the issues where insights are needed. Four expert appraisal reports incorporating components in the human and social sciences were published during 2018.

In the one on electromagnetic hypersensitivity, a sociological reading of the testimonies of people declaring themselves as electrohypersensitive was carried out, as well as an analysis of the societal context. This analysis mainly focused on the dynamics of how associations are mobilised and the treatment of electrohypersensitivity in the media. In the Opinion on the safety of feminine hygiene products, the work involved documenting the uses of these products and the perceptions of the associated risks, based on a literature review and a user survey. A socio-political comparison of the mobilisations and debates regarding synthetic surfaces was conducted in support of the work carried out on possible health risks associated with sports pitches or children’s playgrounds manufactured from used tyre aggregates. Lastly, with the support of a working group of economists and agronomists from INRA and France-Agrim'era, a team from this unit coordinated production of the report on the possible impact on agricultural activities of the ban on neonicotinoid substances.
ASSESSMENT OF CHEMICAL SUBSTANCES

ANSES provides scientific support to the French authorities in charge of implementing the REACh Regulation on chemicals. On the basis of the information provided in the manufacturer’s dossiers and all the other scientific information at its disposal, ANSES targets chemicals for which it believes a detailed examination of the available information is warranted in order to request additional studies from the declaring parties (assessment procedure) or clarify a suspected risk. The Agency may also propose additional management measures under REACh procedures (classification, identification of substances of very high concern for authorisation, restriction) or under other regulatory instruments. When its supervisory authorities decide to initiate a regulatory procedure at European level, ANSES is responsible for preparing the proposals and defending them in the European discussion forums.

ANSES also takes part in the expert activities coordinated by ECHA, in particular the European expert groups on the assessment of substances of very high concern for their persistence, bioaccumulation in the environment and toxicity, or for their very persistent and very bioaccumulative nature, as well as on the assessment of potential endocrine-disrupting substances. In 2018, ANSES submitted two dossiers to ECHA for the identification of substances of very high concern: pyrene and phenanthrene.

The year also saw intense activity concerning the assessment of titanium dioxide and the amendment of the REACh annexes to enable better assessment of the nanoforms of chemicals by 2020. It was also the final year of the First National Endocrine Disruptor Strategy. As part of the preparation for the new strategy, the Agency assessed three potential endocrine-disrupting substances, two of which should be submitted for recognition of this effect at European level. In 2018, it also finalised work that began in 2012 on the assessment of a number of substances, under the CoRAP of the REACh Regulation. ANSES therefore played a very active role in European discussions in the Member State Committee to reach a consensual decision that was endorsed by ECHA. This relates to six substances:

- methyl methacrylate
- dodecylphenol sulphide calcium salts
- potassium permanganate
- formaldehyde
- trimethylolpropane triacrylate
- tolidine diisocyanate

The Agency also took part in the work to identify new substances of interest carried out during the annual manual screening exercise led by ECHA. Lastly, it issued risk management recommendations for persulphate salts, whose use causes serious adverse effects in the hairdressing sector and whose management falls under the Cosmetics Regulation.
REGULATED PRODUCTS

Assessment and marketing of plant protection products and fertilisers

The Agency is tasked with assessing plant protection products, fertilisers, growing media and adjuvants. On the basis of the conclusions of its assessments, ANSES is then responsible for issuing, amending or withdrawing marketing authorisations (MAs) and permits for all of these products, in compliance with European and national regulatory frameworks.

Assessments of plant protection products concern the effectiveness of the products and the risks that their use may pose to human health (for workers applying the treatment as well as any agricultural workers handling the treated plant, any residents and people in the vicinity at the time of application), risks for consumers of plant products, and risks to the environment and wildlife.

Assessments of plant protection products prior to their placing on the market are carried out within the framework of European Regulation (EC) No 1107/2009, whose provisions are binding on Member States.

Marketing authorisations are therefore issued, amended or withdrawn on the basis of the conclusions of a scientific assessment of the products’ effectiveness and risks.

The Agency examines decisions relating to the issuing, amendment and withdrawal of different authorisations prior to placing on the market or experimentation of plant protection products, additives, fertilisers and growing media, based on the conclusions of the scientific assessment of the dossiers, within a very strict regulatory framework. It also has an inspection mission with regard to the production, formulation, packaging and labelling of plant protection products, adjuvants, fertilisers and growing media.

To carry out these tasks, ANSES relies on guidelines that ensure the transparency, clarity and fluidity of the decision-making process. These guidelines, which were submitted for public consultation before being adopted, are accessible on the Agency’s website. They aim to describe the criteria enabling the Agency to exercise its power of judgement, on the basis of the scientific assessment of the MA application dossiers, carried out in compliance with the regulations. The intention is to ensure greater transparency by clarifying which cases may, in addition to the work to assess the dossiers, require a further review, mainly concerning the risk management measures integrated in the MA decisions. It is also supported by an MA monitoring committee, as provided for by law, made up of individuals with knowledge and experience of field practices and of the difficulties encountered in the conditions under which the MAs are implemented. This committee can be consulted by the Director General of ANSES, in particular to provide an additional perspective on scientific assessment, or to verify that the risk management measures imposed in the framework of the MAs are feasible and effective in a real-life situation, in light of the constraints of field practices.

Fertilisers and adjuvants are authorised for a period of ten years. On expiry of the MA, applicants are required to submit an application for the renewal of their authorisation.

Marketing authorisation applications for plant protection products are issued for a duration linked to the expiry of the European approval of the active substances they contain. The MAs of the products are therefore re-examined when the conclusions of the EU assessments of the active substances they contain are available. ANSES reassesses the dossier in its entirety and takes all the field data into account, as well as the latest available scientific knowledge on the potential impact on humans, animals and the environment of the product in question.

The catalogue of plant protection products authorised in France, along with their uses, is accessible via a dedicated website managed by ANSES (http://e-phy.anses.fr). All decisions taken by the Agency in this area and the results of the assessments are also published on the website.

Lastly, to preserve the Agency’s independence, a charter on relations with interested parties aims to guarantee the traceability of exchanges with the parties that interact with the Agency, as well as equitable access to exchanges for the different stakeholders concerned.
Assessment and marketing of biocidal products

ANSES assesses the hazards, risks and effectiveness of biocidal active substances and products for which application dossiers have been submitted in France, in accordance with the criteria defined by the European regulations. Marketing authorisations are then issued on the basis of this scientific assessment of the effectiveness and risks of the products. Since 1 July 2016, ANSES has also been responsible for issuing, withdrawing and amending these MAs for biocidal products, in accordance with European Regulation (EU) 528/2012.

In particular, the organisation set up takes account of the specific features of the European regulations governing biocidal products, while preserving the independence of the assessment and safeguarding the Agency’s ability to effectively support its positions regarding assessment and management in the framework of the European procedure.

Indeed, biocidal products have certain specific features that have an impact on ANSES’s organisation and work in terms of examining these dossiers:

- a very broad field of products and uses,
- very tight regulatory deadlines,
- a European procedure that simultaneously addresses issues relating to assessment and management, and in which mutual recognition is predominant. Great importance is attached to collegial review between Member States, and harmonisation of conditions of use and management measures before decisions are made.

The competence of the MA Monitoring Committee has been extended to biocidal products, meaning that it can now be consulted on issues relating to these products. In 2018, individuals whose field of expertise covers biocides joined the Monitoring Committee.
APPLICATIONS RELATING TO DOSSIERS FOR ACTIVE SUBSTANCES RECEIVED

348 applications relating to dossiers for active substances were received.

1,891 applications for marketing authorisations or experimentation permits were received, of which 179 concerned fertilisers and growing media, 27 adjuvants, and 1,685 plant protection products. The latter included:

- **162** dossiers regarded as “major”, because they concerned either a new MA, or a product re-examination following the re-approval of an active substance, or an extension of major uses;
- **819** dossiers for administrative applications;
- **172** applications for experimentation permits;
- **119** applications for parallel trade permits;
- **413** other applications subject to scientific assessment.

Over **2,000** decisions were signed, of which 183 concerned fertilisers and growing media, 82 adjuvants and 1,819 (87% of the total) plant protection products. These included:

- **204** decisions corresponding to dossiers regarded as “major”;
- **930** administrative decisions;
- **169** decisions for experimentation permits;
- **178** decisions for parallel trade permits;
- **338** other authorisation decisions subject to scientific assessment.
In accordance with the regulatory provisions that stipulate a halving of the processing time for new authorisations, the Agency gave priority to assessments and processing dossiers for biocontrol products.

In 2018, among the dossiers identified on submission as relating to biocontrol:

- 39 applications for MAs and new uses (first MAs, MAs by mutual recognition, generic products, extensions of major use) were received;
- 53 decisions involving applications for new MAs and new uses were made;
- 17 macro-organisms, not covered by the plant protection regulations.

**BIOCIDAL PRODUCTS**

- 155 applications for first MAs, mutual recognition, or minor or major changes;
- 150 administrative requests (adding a commercial name for a product, adding manufacturing sites, etc.);
- 36 miscellaneous requests;
- 28 renewal applications.

In 2018, which was the second full year for this mission, ANSES issued decisions for 571 biocidal products, including 110 relating to a first MA, major change or mutual recognition.
Glyphosate: ANSES launched a comparative assessment with the available alternatives

Following the five-year re-approval of this active substance at European level in December 2017, ANSES is reassessing marketing authorisations for products containing glyphosate. For products for which an application for authorisation or re-authorisation has been submitted, the Agency will carry out a comparative assessment with the available alternatives. For each glyphosate-based product, all uses for which there is an alternative that meets the substitution criteria will therefore be prohibited. The work will be conducted in 2019. The Agency also notified manufacturers of the expiration of marketing authorisations for 132 products for which no renewal applications have been submitted.

Risks and benefits of plant protection products containing neonicotinoids compared with their alternatives

In 2016, as part of the implementation of the Act “for the restoration of biodiversity, nature and landscapes” and as requested by the Ministries of Agriculture, Health and Ecology, ANSES initiated an assessment weighing up the risks and benefits of plant protection products containing neonicotinoids, compared with their chemical and non-chemical alternatives. According to the Agency’s Opinion, for the majority of uses of plant protection products containing neonicotinoids, sufficiently effective and operational chemical and non-chemical alternatives were identified. However, it was not possible to identify chemical substances or classes of substances with overall risk profiles less unfavourable than that of neonicotinoids. The Agency emphasised that the impact of the ban on neonicotinoids on agricultural activity is difficult to anticipate and recommended speeding up the provision of effective alternative methods for crop protection and management that are safe for humans and the environment.

The French Agency for Veterinary Medicinal Products assesses national and European marketing authorisation (MA) applications for veterinary medicinal products, as well as European dossiers on acceptable maximum residue limits in foods of animal origin. It issues MAs for veterinary medicinal products, authorises clinical trials, imports, temporary use and the opening of establishments for pharmaceutical manufacturing, operation, wholesale distribution and export, and also certifies exports of veterinary medicinal products. It monitors the risk of adverse effects and problems of market availability of veterinary medicinal products, verifies product quality and advertising, and inspects veterinary pharmaceutical establishments. Lastly, it is a collaborating centre of the World Organisation for Animal Health (OIE) and, as such, participates in and delivers various training courses for OIE focal points.
MARKETING AUTHORISATIONS IN 2018

150 MAs issued

2,017 procedures for amending MAs notified

119 MA renewals

146 MA transfers (19 transfers between holders)

618 import authorisations issued

20 submissions for clinical trials

1 application for a temporary authorisation for use

45 batch release authorisations

INSPECTION AND MARKET SURVEILLANCE

71 inspections of pharmaceutical establishments

22 applications for authorisation to open veterinary pharmaceutical establishments,
71 amendment applications, 9 transfer applications

2,678 certificates for export of veterinary medicinal products
PROVIDING OPINIONS AND RECOMMENDATIONS OF USE TO DECISION-MAKERS AND THE GENERAL PUBLIC
ANSES has a unique observation and expertise capability over a very broad range of risks, which gives it a central “One Health” reference position regarding humans, animals and plants. Drawing on collective and independent expert appraisals, ANSES provides opinions and recommendations to support the development of public policies; it also provides useful advice to the general public. In addition, its research, reference, monitoring and expert appraisal activities enable it not only to provide rapid support during health crises, but also to anticipate new risks in order to better guide prevention and health for everyone in their daily lives.

PROVIDING SCIENTIFIC SUPPORT TO COMBAT HEALTH CRISSES

During 2018, ANSES demonstrated its ability to act promptly and provide support to risk managers during several health crises, which all required the emergency deployment of the reference laboratories and risk assessment teams.

Focus on African swine fever

African swine fever has been steadily gaining ground in Eastern Europe since 2007, from the Baltic States to Romania, affecting wild boar and domestic pigs. This situation led ANSES to take action from the beginning of 2018, through its mandate as the National Reference Laboratory for African swine fever. In early April, the NRL set up a kit validation process, to enable the deployment of a network of laboratories dedicated to first-line diagnosis, and organised an on-call system seven days a week from June 2018 for confirming or refuting suspicions. In addition, two epidemiologists from ANSES and the Directorate General for Food were deployed during the summer on a scientific and technical support mission to the Romanian management authorities. This risk anticipation exercise proved very useful when the first case occurred in wild boar in Belgium on 13 September 2018, just a few kilometres from the French border. The animal health team of ANSES’s Risk Assessment Department was immediately mobilised, along with the members of the Expert Committee on “Animal health and welfare”, to provide an urgent response to some ten formal requests received on this subject since then. The emergency collective expert appraisal group, made up of virologists, epidemiologists and biologists specialising in wildlife, dealt with various questions on the management arrangements to be put in place in France, in coordination with the Belgian authorities, to avoid as far as possible the spread of the epidemic into French territory. The effective Franco-Belgian cooperation on this issue also helped establish the principle of scientific collaboration to support risk assessment and management. With a longer-term perspective, ANSES’s research teams are continuing their work on vector transmission of the disease and are involved in international consortia on vaccine research, as there is not yet any effective vaccine to prevent this disease.
AFRICAN SWINE FEVER: A VIRUS SPECIFIC TO SUIDAE (PIGS, WILD BOAR)

- No treatment, no vaccine.
- No transmission to humans (it is not a zoonosis).
- Prolonged survival of the virus in uncooked meat (long-distance spread).
- 161 cases confirmed in wild boar in Belgium since 13 September 2018.
- Measures in France to assess the situation and protect livestock.
- An active search for wild boar carcasses in the reinforced observation zone (50 border communes) and in the observation zone in the other communes of four border départements (Ardennes, Meurthe-et-Moselle, Meuse, Moselle). 27 carcasses found in these areas, all negative.
- Elsewhere in France, 57 carcasses tested, all negative.

ANSES’S ANALYTICAL ROLE

- Mandate as National Reference Laboratory for swine fever at the Ploufragan-Plouzané-Niort Laboratory.
- Diagnosis possible seven days a week (on-call health service).
- Validation of commercial diagnostic kits (PCR/ELISA).
- Biosecurity audits (L3) for approval of local laboratories.
- Research on modes of transmission and vaccine options supported by the cross-functional programme.

ANSES’S CONTRIBUTION TO THE EXPERT APPRAISAL

Operational support to the Romanian authorities (ANSES/DGAL missions) in August 2018; participation in the ASF Action Plan’s Technical Monitoring Group; work on formal requests on ASF and related subjects (emergency collective expert appraisal group).

ANTHRAX

First suspicion of anthrax on a four-month-old grazing calf in the commune of Montgardin (Hautes-Alpes).

The ANSES National Reference Laboratory confirmed eight outbreaks (affecting 17 animals); investigation conducted by the NRL and the epidemiology unit of the Lyon Laboratory, at the request of the Ministry of Agriculture.

The verdict:

- Episode of clustered cases that are significant in number and affected area, but otherwise quite classic.
- Most likely hypothesis: succession of dry and wet periods facilitating the rising of spores to the soil surface and their ingestion.
- No other hypothesis can explain all the cases.
- The management measures already taken are adequate.
**Xylella fastidiosa**, an emerging polyphagous phytopathogenic bacterium affecting various plants in Europe

*Xylella fastidiosa* is a phytopathogenic bacterium transmitted and mediated by insect vectors that feed on rising xylem sap (xylem biting and sucking insects such as leafhoppers and spittlebugs). It can affect more than 300 plant species belonging to 60 different botanical families: grapevines, citrus, fruit trees (Prunus, olives, etc.), coffee, avocado, alfalfa, oleander, oak, maple, etc. There is no cure for this bacterium, other than grubbing up and destroying contaminated plants and controlling its insect vectors.

The emergence of this bacterium is known to cause Pierce’s disease on grapevines in California, citrus variegated chlorosis in Brazil and, since 2013, olive quick decline syndrome in Puglia, Italy. Following the interception of this bacterium on imported coffee plants in France in 2012, ANSES’s Plant Health Laboratory was asked by the Directorate General for Food to assess the risk, in particular relating to the dispersion of *Xylella fastidiosa* via insect vectors. The first French outbreak of *Xylella fastidiosa* was reported in Corsica and then in the Provence-Alpes-Côte d’Azur region in 2015. The Plant Health Laboratory was responsible for assessing and validating analytical methods on plants and insect vectors so as to implement the regulatory surveillance plan.

It was also responsible for carrying out the corresponding analyses following detection of the first outbreak in Corsica, analysing the genome of the isolated strains (in collaboration with INRA and the Ploufragan-Plouzané-Niort Laboratory platform), and developing a method for identifying the *Xylella fastidiosa* strains found in the samples. More extensive studies were conducted as part of a Horizon 2020 project with European funding, additional regional funding from Pays de la Loire shared with INRA, and including a thesis co-funded by ANSES and INRA on the diversity of *Xylella fastidiosa* strains and invasion routes. In addition, the Lyon Laboratory was asked by the Directorate General for Food to compile *Xylella fastidiosa* surveillance data from plant health services and analytical laboratories on a national scale. An Internet application was developed to enable risk managers to monitor the health situation, help manage outbreaks via maps of infected areas, and access data quality indicators. A second application was made available to enable the public to determine their location with regard to the different “restricted” zones (subject to restrictions on plant movements). The Lyon Laboratory and the Plant Health Laboratory were also involved in methodological work to improve surveillance of the bacterium as part of the epidemiological surveillance platform for plant health.
Cases of haemolytic uremic syndrome in very young children related to E. coli in reblochon

Cases of haemolytic uremic syndrome, particularly worrying because of the severity of the symptoms and especially the very young age of the patients (around 2 years, sometimes less), were identified in the context of two outbreaks linked to the consumption of raw-milk reblochon cheese, in mid and then late 2018.

These cases followed consumption of reblochon of protected designation of origin from different manufacturers and involving several brands. Manufacturers issued a national recall of the batches likely to be contaminated.

These episodes were a reminder of the importance of control measures at every step, in which ANSES is involved at several levels: participation in vigilance and alert networks; management support through an opinion on the protocol for resuming reblochon marketing proposed by the dairy company Chabert; and production of scientific evidence to support inter-ministerial debates on potential forms of information for better managing risks for vulnerable populations.

In this regard, in line with its work on allergies and dietary guidelines as part of the updating of the French National Nutrition and Health Programme for children, ANSES reiterated the importance of diversifying the infant’s diet, from infant formula through to varied solid foods, neither too early nor too late (not before the age of 4 months or after the age of 6 months). This also requires compliance with certain essential practices, as not all foods are suitable for children, who are a more sensitive population than adults.

ANSES’S WORK USED FOR THE ADOPTION OR REVISION OF REGULATIONS

Classification of titanium dioxide (TiO₂)

According to the European Regulation on classification, labelling and packaging (CLP), there are three categories for carcinogenicity: Category 1A (based on human data), Category 1B (mainly based on sufficient evidence of carcinogenicity in animals) and Category 2 (based on limited evidence of carcinogenicity in animals). Concerning the classification of TiO₂ for its toxicity by inhalation, in September 2017 ECHA’s Risk Assessment Committee agreed to classify it as a Category 2 carcinogen on the basis of a French dossier proposing Category 1B. ANSES was fully involved until June 2018 at the request of the ministries, with a view to providing the scientific evidence needed to establish the French position on this subject. The next step for formal inclusion in the CLP Regulation will be a vote by Member States in the European Commission.

ENTEROHAEMORRHAGIC STRAINS OF ESCHERICHIA COLI

The bacterium Escherichia coli is found naturally in the digestive microflora of humans and warm-blooded animals. Some strains of E. coli are pathogenic, including enterohaemorrhagic E. coli (EHEC). In humans, EHECs are responsible for a variety of disorders ranging from mild diarrhoea to more severe forms, including haemorrhagic diarrhoea and severe kidney disease such as haemolytic uremic syndrome (HUS), mainly in young children. HUS is a kidney complication caused by certain EHEC infections, involving major failure that can sometimes lead to a loss of kidney function. Santé publique France records around 150 cases of E. coli infections with HUS complications in France every year as part of national surveillance of paediatric HUS cases (children under 15 years of age). HUS always require the greatest vigilance given the severity of the symptoms (potential perennial sequelae, possible fatalities).

REACH & CLP REGULATIONS

These two regulations apply to chemicals that are not covered by sectoral regulations (for medicines, plant protection products, etc.). As part of the registration procedure under the REACh Regulation, manufacturers must produce information on the physico-chemical, toxicological and ecotoxicological properties of the substances they manufacture or import, as well as information on their tonnages, uses and the resulting human and environmental exposure. These data are used to identify hazards and assess the associated risks. If any risks are expected, manufacturers must establish restrictions on use or management measures for users of the substances, to ensure that the associated risks to humans and the environment are controlled.
ANSES restricted the use of products containing creosote

ANSES examined several marketing authorisation applications for products containing creosote, a biocidal product used to treat and prolong the life of railway sleepers, telephone and electricity poles, fences and enclosures (for example, in agricultural, equestrian or roadside contexts). As a result of these investigations, the Agency decided to restrict the use of creosote in France to the treatment of railway sleepers. Even so, the marketing authorisations will now be accompanied by stringent conditions of use, to avoid worker exposure and reduce environmental risk. ANSES also suggested that a substitution plan be implemented by rail network operators in order to progressively phase out creosote. The other uses of creosote, such as treating wood for telephone and power line poles and also for fences, are no longer to be permitted due to the risks to the environment.

This restriction is now subject to regulatory measures by order of the Ministries of Ecology, Health and Labour concerning the conditions under which this wood can be marketed and disposed of. Wood treated with creosote, a carcinogenic substance, may no longer be placed on the market, with certain exceptions. Following this decision, a voluntary commitment charter on creosote-treated wood was signed by the stakeholders under the leadership of Brune Poirson, Secretary of State to the Minister of State for Ecological and Inclusive Transition, in December 2018.

Implementation of the new European regulations for veterinary medicinal products

The European regulations on veterinary pharmaceuticals have been fully revised with a view to the planned publication, at the beginning of 2019, of two new regulations, applicable in 2022, dealing respectively with veterinary medicinal products and medicated feedingstuffs. A study was initiated in March 2018 to identify each of the measures having an impact on the activities of the French Agency for Veterinary Medicinal Products (ANMV). Each theme is being reviewed by the Agency’s specialist departments and support units in order to determine specific action plans to be implemented. This process concerns the scope of the ANMV’s missions, the adaptation of its organisation and internal procedures, and the role of its expertise in negotiations on secondary procedures with the relevant European bodies. The ANMV will also be involved in work on the revision of French national law to bring the French Public Health Code and Rural and Maritime Fishing Code into line with European law.

Products containing metam-sodium: ANSES withdraws their marketing authorisations

Plant protection products containing metam-sodium are used in market gardening and horticulture to disinfect the soil. Following the substance’s approval at European level, ANSES reassessed the dossiers and notified the industrial companies concerned of its intention to withdraw all marketing authorisations for metam-sodium products. ANSES also took this opportunity to reiterate the importance of phytopharmacovigilance and the requirement for professionals to report any adverse effects on humans or the environment involving a plant protection product.
MONITORING MISSIONS:
VITAL TO ANTICIPATING RISKS

ANSES performs monitoring, vigilance and alert activities that are an integral part of the national health monitoring system. These different actions feed into its risk assessments by informing it of actual conditions in the field, through the reporting of alerts, thus enabling the Agency to respond more efficiently in the event of a health crisis. ANSES also has a team devoted to scientific monitoring, which provides support for expert appraisals and research within the Agency.

MONITORING, SURVEILLANCE, VIGILANCE: WHAT IS THE DIFFERENCE?

“Health monitoring” refers to all actions seeking to recognise the occurrence of an unusual or abnormal event that may present a risk to human, animal or plant health, with a view to anticipation, alert and early action.

An “alert” is defined as a sufficiently validated signal where it was decided after an initial risk assessment that it represents, with a significant probability, a threat to a population’s health and requires an appropriate response.

“Surveillance” corresponds to the systematic and continuous collection of data, as well as their analysis, interpretation and distribution, with a view to assisting with decision-making.

A “vigilance” scheme is a system for collecting information to help detect adverse effects associated with the use of any given products or materials.

NUTRIVIGILANCE

ANSES is in charge of the nutrivigilance scheme, created in 2009, which collects and analyses adverse effects associated with the consumption of food supplements, foods or drinks fortified with substances for nutritional or physiological purposes (including energy drinks), novel foods and foods intended for specific diets (infants, athletes, patients suffering from food intolerances, etc.).

These adverse effects are identified through spontaneous reports from health professionals, mainly physicians and pharmacists. They can submit online reports either directly on the ANSES website or via the Ministry of Health’s adverse health event reporting portal. Since the scheme was set up, more than 4,000 reports have been recorded by ANSES. These are analysed to assess the health risk and, where necessary, to take measures to continuously improve consumer safety.

Pollen allergies and food supplements

Cases of allergies associated with the consumption of food supplements are regularly reported to ANSES under its nutrivigilance scheme. In particular, severe allergies following the consumption of food supplements containing hive products (royal jelly, propolis) and pollen have been reported. ANSES reminds consumers that people who are allergic to pollen can potentially be at risk from allergies when consuming foods and food supplements containing hive products.

Consumption of food supplements containing melatonin

Under the national nutrivigilance scheme, reports of adverse effects likely to be associated with the consumption of food supplements containing melatonin have been brought to the attention of ANSES. It therefore conducted an assessment of the potential health risks, which highlighted the existence of at-risk populations and situations, for which the consumption of melatonin in the form of a food supplement should be avoided or medical advice should be sought. This mainly concerns pregnant and breastfeeding women, children and adolescents, people suffering from inflammatory or autoimmune diseases, people with epilepsy, asthma, or suffering from mood, behaviour or personality disorders, as well as anyone being treated with medication. People carrying out any activity requiring sustained vigilance where drowsiness could pose a safety problem should also avoid its consumption.
THE NATIONAL TOXICOVOGILANCE SCHEME

The aim of toxicovigilance is to monitor the acute or chronic toxic effects for humans of exposure to a natural or synthetic substance or mixture available on the market or found in the environment, for alert and prevention purposes. Toxicovigilance covers products that do not fall within the scope of other regulated national vigilance systems (pharmacovigilance, addictovigilance, cosmetovigilance, phyto-pharmacovigilance, nutrivigilance, etc.).

Since 2016, ANSES has been responsible for coordinating the toxicovigilance scheme, relying on a network of eight poison control centres (Angers, Bordeaux, Lille, Lyon, Nancy-Grand Est, Marseille, Paris and Toulouse) and two specific toxicovigilance systems (French Caribbean and Reunion Island).

Increase in poisoning associated with the consumption of wild mushrooms

Throughout the year, ANSES monitors cases of poisonings due to wild mushrooms. The cool, damp weather at the beginning of November 2018 was conducive to the growth of wild mushrooms and as a result, the number of reported poisonings increased significantly. In response to this situation, ANSES and the Directorate General for Health issued a warning to wild mushroom gatherers and reminded them of the good practices to be observed. In most cases, these poisonings result from confusion with other edible mushrooms, hence the importance of vigilance both for connoisseurs and occasional pickers. This type of poisoning can have serious health consequences (severe digestive disorders, liver damage that may require a transplant) and can even be fatal. Seven serious cases were recorded from July to December 2018, including four in November alone.

POISON CONTROL CENTRES

The poison control centres are medical entities located in university hospital centres. Their missions include toxicological expertise, and advice for medical care and prevention via toxicological emergency telephone hotlines.

Available every day around the clock, the poison control centres receive calls from both individuals and healthcare professionals asking them to assess a (usually individual) toxicological risk following exposure to a non-restrictive, wide variety of products or substances, found naturally in the environment or produced by humans, as well as plants, fungi, animals or insects.

All calls to poison control centres are recorded in SICAP, the CAPs’ common information system. Poison control centres can also record cases of poisoning collected from healthcare professionals in their local networks, which do not involve calls to the hotline.

The poison control centres regularly forward alerts, which are discussed in meetings at the Ministry of Health and give rise to information or management measures.

Button batteries: prevent their ingestion by young children and adopt the right reflexes in the event of an accident

In view of the numerous cases of very young children (usually under six years of age) ingesting button batteries, with serious and sometimes fatal consequences, the health authorities once again alerted parents, carers and health professionals to this little-known health risk and made them aware of the immediate steps to take in the event of an accident. Based on their data, the poison control centres conducted a retrospective study published in 2017: between January 1999 and June 2015, 4,030 cases were studied, all ages combined, two children died and 21 serious cases were observed. This study highlighted a significant increase in cases of ingestion with clinical signs, from 7% of cases in 1999 to 18% in 2015.

After picking wild mushrooms

- Wash your hands thoroughly after gathering mushrooms.
- Take photos of your mushrooms before cooking: this will be useful in the event of poisoning.
- If you have any doubts, ask a specialist to check your harvest. Seek advice from a pharmacist or local mycology associations and societies.
- Store your mushrooms in the refrigerator in a separate container.

MAX 4°C

SAFETY WHEN PICKING AND EATING WILD MUSHROOMS

Wild mushrooms should only be consumed occasionally. This type of poisoning can have serious health consequences (severe digestive disorders, liver damage that may require a transplant).

Take the entire mushroom (stalk and cap).

Avoid picking wild mushrooms in bad weather (rainy, windy, damp).

Wash your hands thoroughly before eating wild mushrooms. Cook the mushrooms thoroughly. Never eat them raw.

Separate the harvested mushrooms according to species, according to your knowledge base.

If you have any doubts, ask a specialist to check your harvest. Seek advice from a pharmacist or local mycology associations and societies.

After picking wild mushrooms, use a plastic bag: it is allowed to use a carryall (bag) but not a crate or box.

Put your mushrooms in the refrigerator, MAX 4°C. Never eat them raw.

Remember: picking wild mushrooms is allowed in good condition. Picking wild mushrooms is not allowed in bad condition (roadsides, industrial zones, landfills).

What to do in the event of poisoning

• Be sure to note the time of consumption, but in any case, the time of the first symptoms.
• Keep any leftover mushroom meal(s) and the specimen, throw the mushroom away!
• Call a poison control centre.
• Since 2016, ANSES has been responsible for coordinating the toxicovigilance scheme, relying on a network of eight poison control centres (Angers, Bordeaux, Lille, Lyon, Nancy-Grand Est, Marseille, Paris and Toulouse) and two specific toxicovigilance systems (French Caribbean and Reunion Island).

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THE PHARMACOVIGILANCE SCHEME FOR VETERINARY MEDICINAL PRODUCTS

The French Agency for Veterinary Medicinal Products (ANMV) is the competent authority for the assessment and management of risks associated with veterinary medicinal products in France. It monitors the risk of adverse effects and problems of market availability of veterinary medicinal products, verifies product quality and advertising, and inspects veterinary pharmaceutical establishments. In 2018, 4,767 adverse effect reports were assessed, of which 2,347 were considered serious.

Reports of adverse effects are processed differently (lead times, obligations for reporting and transmission channels) depending on whether or not the observed adverse effect is serious. In the past few years, the ANMV has published various documents to help veterinarians and manufacturers determine this degree of severity. In this context, a new annex on the definition of serious cases in the beekeeping sector was published in August.

Monthly publication of a pharmacovigilance case

Since June 2018, based on an adverse effect reported to the ANMV or the Veterinary Pharmacovigilance Centre in Lyon (CPVL), a pharmacovigilance case has been discussed every month in La Dépêche Vétérinaire. The goal is to use real events to explain the assessment of cases as undertaken by ANMV or CPVL pharmacovigilance specialists, according to the assessment method in force in the European Union.

Preparation and handling of slime: the health authorities call for continued vigilance

ANSES, the Directorate General for Health and the Directorate General for Competition, Consumer Affairs and Fraud Control reiterated the risks associated with preparing and handling “slime”, an elastic putty for kneading that is very popular with children and adolescents. The repeated and prolonged handling of this putty can cause sometimes severe skin irritations and allergies. From January to May 2018, the number of reported cases was double the number identified for all of 2017. In particular, the health authorities wished to draw attention to the risks associated with “home-made” slime, which exposes users to direct contact with products misused for this purpose, such as detergents and glues. Users were also reminded of the importance of compliance with the precautions for use indicated on ready-to-use forms and “toy” kits sold in shops.

Apricot kernels pose a risk of cyanide poisoning

A familiar ingredient for jam-makers, apricot kernels are increasingly being consumed as a natural remedy for their claimed “anti-cancer” properties. While one kernel added to perfume several jars of jam is not a problem, ingesting them in large quantities exposes consumers to the risk of cyanide poisoning. Through its toxicovigilance scheme, ANSES encouraged consumers to exercise caution, following the analysis of cases of apricot kernel poisoning in France recorded by the poison control centres.
THE RNV3P, A NETWORK FOR VIGILANCE AND OCCUPATIONAL DISEASE PREVENTION

The RNV3P, coordinated by ANSES, is a network of occupational health professionals that includes the 30 occupational disease clinics (CCPPs) in metropolitan France. The purpose of the network is to record data from CCPP consultations in a national database (patient demographic data, diseases, exposure, industry sector, occupation, etc.).

The RNV3P uses its data to perform vigilance work, particularly regarding the early identification of emerging or re-emerging situations involving an occupational risk. The network also works on prevention and the harmonisation of diagnostic practices for diseases related to work and the environment.

Data on cancers of occupational origin

At the 35th French occupational medicine and health congress (CNMST) held in Marseille in June 2018, ANSES presented for the very first time data on cancers of occupational origin collected by the RNV3P network. These data are used to build up a comprehensive picture of the cancers associated with different jobs, in order to identify the exposure situations where preventive action may be necessary. As part of the 2014-2019 Cancer Plan, the network recorded and analysed data on more than 11,000 cases of cancer diagnosed between 2001 and 2016. It involved a study of all the jobs associated with the diagnosis of 11 types of cancer: bronchus, urinary tract, breast, kidney, larynx, sinus, colorectal, skin excluding melanoma, central nervous system, mature lymphoid blood diseases and myeloid leukaemia. The analysed data included the exposure circumstances (pollution, industry sectors and work stations), extra-occupational risk factors, and the strength of the link between exposure and disease as estimated by the expert physician.

The results presented show that asbestos was implicated in 42% of the studied cases of cancers of occupational origin, far ahead of the polycyclic aromatic hydrocarbons implicated in 6.5% of cases. They mainly affect individuals working in skilled metallurgy trades, mechanical construction and related (22.9%), skilled construction trades and related (22.1%), and drivers of machines and fixed equipment (7.3%).

The proper use of antiparasitics for treating pets

These antiparasitics are used to treat or prevent animal infestations by pests such as ticks. Each antiparasitic agent used in veterinary medicine is subject to marketing authorisation, issued by the French Agency for Veterinary Medicinal Products on the basis of an assessment of the benefits and risks for a given animal species. These veterinary medicines, which can be purchased from pharmacists and veterinarians, but also from supermarkets and garden centres, are not completely innocuous and users should always comply with the precautions for use recommended by the Agency. ANSES regularly records serious, even fatal, adverse reactions in cats treated with topical antiparasitics containing permethrin, intended for dogs. These products can cause neurological disorders (tremors, seizures, ataxia, agitation, coma) sometimes associated with digestive symptoms, which can be fatal in cats. Just a few drops can be enough to cause serious effects in the most sensitive cats. Adverse effects in humans can also occur through contact with treated animals, or through direct contact with a veterinary medicinal product during administration to animals. They can also occur as a result of incorrect handling or use, or accidental ingestion. To prevent this type of effect from occurring, ANSES reiterated the importance of strict compliance with the conditions of use stated in the instructions provided with each product.
PHYTOPHARMACOVIGILANCE

The phytopharmacovigilance scheme, created in 2014 under the French Act on the future of agriculture, food and forests, is designed to monitor and detect any adverse effects on humans, farmed animals including honeybees, cultivated plants, biodiversity, wildlife, water and soil, air quality and food, associated with the use of plant protection products, as well as the emergence of resistance to these products. This scheme coordinated by ANSES enables the continual collection and production of potentially useful information for risk assessment, placing products on the market and risk management.

The scheme has a network of nine partners, including three new organisations in 2018: “Toxinelle” for monitoring mortality and morbidity of domestic animals and poisoning cases, the Indoor Air Quality Observatory, and “Sol” for soil monitoring.

In 2018, ANSES continued to develop and ramp up its phytopharmacovigilance scheme through various actions.

Several reports of adverse effects were investigated. These included cases of multiple poisonings of local residents by metam-sodium; the potential toxicity of SDHI fungicides, which had been the subject of an alert issued by a team of scientists; the contamination of untreated crops with prosulfocarb. This last report led to some initial risk management measures in 2017. In view of the persistence of the unexpected spread of this active substance, preventive measures were stepped up in 2018 and their effectiveness will be assessed in early 2019.

In addition, to strengthen data collection, ANSES made reporting forms available on its website in 2018. They are specifically aimed at professionals with a reporting obligation (MA holders, manufacturers, importers, distributors, professional users, advisers and trainers).

ANSES also produced and published summaries of the data available from partner schemes. These are posted on the Agency’s website in the form of data sheets for each active substance, accompanied by an explanatory notice (https://www.anses.fr/en/content/phytopharmacovigilance-fact-sheets-more-information-plant-protection-substances).

Lastly, the Agency launched new studies to consolidate the surveillance schemes and the collection of phytopharmacovigilance data by the partner networks, and to generate new knowledge. For the period 2018-2020, ANSES has identified four strategic priorities for these studies:

- ambient air for the general population and for specific populations;
- exposure and the impact on agricultural workers;
- bees and other pollinators;
- biodiversity and environmental media (soil).

The overall review of ANSES’s risk assessment activities, the granting of marketing authorisations and experimental permits, and phytopharmacovigilance is covered in a dedicated activity report available on the Agency’s website.
INCREASED HEALTH SURVEILLANCE

In 2017, the national consultation on the food sector had stressed the need to strengthen the national scheme for monitoring and preventing health risks. In 2018, at the Paris International Agricultural Show, the Ministry of Agriculture and Food, ANSES and INRA entered into an agreement to increase health surveillance in the areas of plant and animal health, and food safety. Surveillance measures contribute to the effective management of public action, in particular by helping to anticipate health crises and reduce their consequences. Epidemiological surveillance platforms are based on the sharing of resources, skills and tools with a common objective of protecting animal, plant and human health. These platforms are essential for disease prevention and control.

The ESA epidemiological surveillance platform for animal health

The new framework agreement for the epidemiological surveillance platform for animal health was signed by the Director General for Food on 20 June 2018 for a period of 10 years, signalling a new departure for the platform. The ESA platform has demonstrated its usefulness and effectiveness ever since its creation in late 2011, and has provided a rapid response to successive health crises: Schmallenberg disease, episodes of highly pathogenic avian influenza, the re-emergence of bluetongue serotype 8 and emergence of bluetongue serotype 4 in mainland France. It includes an international health monitoring system enabling the timely development of surveillance schemes for health hazards threatening our country (including African swine fever, bovine lumpy skin disease, exotic bluetongue serotypes and the small hive beetle). It also includes innovative surveillance schemes: the Observatory for Livestock Mortality (OMAR), the Observatory for Honeybee Mortality and Weakening (OMAA), and the Observatory for Monitoring the Causes of Abortion in Ruminants (OSCAR). Today, more than twenty health topics are being monitored through the ESA platform, covering the main health hazards in many production sectors, as well as in wildlife. The coordination team has been strengthened, and brings together ANSES, the Directorate General for Food and INRA.

The epidemiological surveillance platform for plant health

On 9 July 2018, ANSES signed the framework agreement for the launch of the epidemiological surveillance platform for plant health, with four other members: INRA, Fredon France, ACTA, and APCA. This platform receives operational support from a team within the Epidemiology and Surveillance Support Unit of the Lyon Laboratory and a team from INRA. This tool is essential for detecting the appearance of an emerging disease or health hazard, assessing its health impact and economic consequences, prioritising the various control actions, and assessing the effectiveness of the measures implemented.

SURVEY OF WINTER MORTALITY OF BEES

Following reports by beekeepers and beekeeping organisations of an increase in the mortality rate of bee colonies in several regions in the winter of 2017/2018, the Ministry of Agriculture and Food launched a nationwide survey to estimate this mortality rate as precisely as possible. The aim was also to gather beekeepers’ views on whether there was an increase in mortality rates in their apiaries at the end of winter 2017-2018 compared to the previous winter, and the possible causes of this mortality. The survey was designed and implemented in one month by a group including employees from the Sophia Antipolis and Lyon Laboratories, the Directorate General for Food, the regional food services of Bretagne and Pays de la Loire, and the ITSAP Bee Institute, under the coordination of the ESA platform.
ANTIMICROBIAL RESISTANCE

Antimicrobial resistance is a major public health issue in France: resistance to antibiotics calls into question the efficacy of treatments for infections occurring in humans and animals alike. At the 2018 edition of the annual symposium on this issue, ANSES presented the result of its two annual reports, one on national trends in resistance in animals (Resapath report) and the other on sales of veterinary antimicrobials. Exposure to antimicrobials regarded as critical continued to decline in 2017 for all species, with a fall of 87.8% for fluoroquinolones and 94.2% for newer-generation cephalosporins compared to 2013.

In 2017, exposure to colistin had fallen by 48% compared to the average exposure for 2014 and 2015. Efforts need to be maintained to achieve the objective of a 50% reduction in exposure to colistin in five years, as set by the new EcoAntibio plan that will run until 2021. Regarding resistance, this year again, Resapath recorded a decrease in resistance to critical antibiotics, in particular that of E. coli to third- and fourth-generation cephalosporins. As in recent years, these declines can be observed in all sectors, and are sometimes considerable, as with cattle and dogs, for instance.

The SCA surveillance platform for food-chain safety

ANSES is one of 14 members that signed the framework agreement for the creation of the SCA platform, alongside the Ministries of Health, Agriculture and the Economy, the public bodies Santé publique France and INRA, the professional organisations ACTA, ACTIA, ANIA, CGAD, Coop de France, FCD and Oqualim, and the ADILVA analytical laboratories. The establishment of this platform will help with the development of an integrated food safety system encompassing all food contaminants and mobilising all the actors involved in the food chain, to ensure consumer safety. It creates a multidisciplinary forum for consultation that pools resources and skills, and optimises food safety surveillance actions. In the long term, the SCA platform should help improve the collection and use of information from monitoring and control plans and self-checks carried out by manufacturers.

RESAPATH

This network collects antibiogram data on pathogenic bacteria of animal origin isolated from sick animals. It can therefore monitor changes in resistance to antimicrobials associated with animal infections, detect the emergence of certain antimicrobial resistance phenomena and characterise their molecular mechanisms. In 36 years of monitoring pathogenic bacteria in France, this network has become an established part of the animal antimicrobial resistance landscape. Its scope has expanded each year; it currently has more than 70 member laboratories and collects over 56,000 antibiograms throughout France. As a member of the National Observatory for Epidemiology of Bacterial Resistance to Antimicrobials (ONERBA), the network provides an obvious interface between veterinary and medical data. In Europe, the ANSES-led Resapath network is therefore a unique model.
EATING FISH

Why should we eat fish?
Fish is an important source of omega-3. It is also rich in protein and important vitamins.

Fish should be eaten twice a week, including one oily fish. (salmon, sardine, herring, mackerel, trout, etc.) Consider varying the species and sources of supply.

There are specific consumption recommendations for sensitive populations. Visit the ANSES website at www.anses.fr.

How should fish be stored and cooked?

Keep the fish refrigerated between 0° and +4°C. Always wash your hands before and after handling fish.

Avoid storing different types of food on the same cutting board.

Cook the fresh fish thoroughly before eating them.

If you are unsure about the condition or the species, throw the mushroom away!

Consumption of picked wild mushrooms

Wild mushrooms should only be consumed occasionally.

The mushrooms should be consumed within a few hours after picking.

The mushrooms should be consumed within a few hours after picking.

What to do in the event of poisoning

If you or anyone close to you should suspect poisoning: call for medical help immediately. Do not try to induce vomiting. If the symptoms occur at home, consult with your local GUM or hospital emergency department.

SAFETY WHEN PICKING AND EATING WILD MUSHROOMS

When picking wild mushrooms

Only pick mushrooms that you know very well.

Separate the harvested mushrooms according to class (edible and poisonous) and species.

If you are unsure about the condition or the species, throw the mushroom away!

If you are unsure about the condition or the species, throw the mushroom away!

After picking wild mushrooms

Wash your hands thoroughly after handling.

Take photos of your mushrooms before cooking, as well as after the event of poisoning.

Keep in mind

There are specific consumption recommendations for sensitive populations. Visit the ANSES website at www.anses.fr.

COOKING ON THE BARBECUE

Fire weather sees the return of barbecues to our gardens. To enable you to enjoy this method of cooking without risk, ANSES offers some advice.

Meal preparation tips

Use high-quality charcoal in this process.

Use a plastic bag: it accelerates decomposition.

Never use a plastic bag: it accelerates decomposition.

Place your mushrooms in the fridge and store your mushrooms in the refrigerator.

Barbecue preparation tips

Keep a long-handled fork to pick the food up. A long-handled fork to pick the food up.

A different chopping board for cooked foods and another for raw meat and fish.

Take photos of your mushrooms before cooking, as well as after the event of poisoning.

What about after the barbecue?

Clear the barbecue grill and clean the fire extinguisher, etc.)

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such as a garage), areas

Fire extinguisher, etc.)

Drink plenty of water, (bucket, (bucket

During cooking

Check meat and other food thoroughly.

Freeze the fish for 7 days before consumption.

Use a plastic bag: it accelerates decomposition.

What to do in the event of poisoning

If you or anyone close to you should suspect poisoning: call for medical help immediately. Do not try to induce vomiting. If the symptoms occur at home, consult with your local GUM or hospital emergency department.

KEEP IN MIND

- Toilet seats should not be used on the grass.
- Keep children away.
- Parents should keep children away.
- Children should not be left unattended.
- Keep children away.
- Children should not be left unattended.
- Children should not be left unattended.
PROMOTING AND DISSEMINATING THE AGENCY’S SCIENTIFIC WORK
ANSES makes the results of its research and expert appraisals available in order to provide benchmark scientific information. As part of this information mission, ANSES strives to make its opinions and recommendations accessible and understandable to all the stakeholders: scientists, associations, professionals, elected officials, the press and the general public. By doing so, the Agency contributes to public debate, especially by providing a broader perspective in the event of controversies or major uncertainties.

ANSES produces benchmark scientific information based on the principles of independence, multidisciplinarity, collegiality and adversarial debate. As well as publishing all the expert work and research results it produces or funds, ANSES carries out multiple communication initiatives to promote its scientific work through a reinforced presence in the media and on social networks, and the organisation of scientific events. ANSES identifies with the international Open Science approach, and deposits its publications in the HAL open archives.

DIGITAL COMMUNICATION

In 2018, ANSES continued its commitment to make its work accessible to as many people as possible. The publication of its scientific work or its various events therefore led to the digital distribution of 70 news updates.

In addition to its institutional website, ANSES coordinates around 20 thematic websites such as the Ciqual table (presenting the nutritional composition of more than 2,800 foods consumed in France), and the E-Phy site on authorisations, uses and conditions of use of plant protection products, fertilisers and growing media in France. In 2018, it launched a new website dedicated to scientific information on chlordecone.

ANSES has also scaled up its activities on social networks. Significant increases in the number of followers (+30% on Twitter, +42% on LinkedIn and +110% on Facebook) reflect the growing interest in information via these communication channels.

Lastly, a newsletter (in French and English) is distributed each month to the Agency’s French, European and international subscribers and partners.

SCIENTIFIC EVENTS

The organisation of events – seminars, meetings or conferences – is a major thrust of the Agency’s policy for disseminating and promoting its scientific work. Every year, ANSES organises more than 30 Scientific Conferences related to its work themes, bringing the research communities together on a subject of interest to the Agency.

BEE HEALTH

Every year, ANSES organises a scientific conference on bee health. As an opportunity to discuss these key questions in light of the latest scientific knowledge, it has become an unmissable event for the various stakeholders, whether they are scientists, professionals, decision-makers or representatives from civil society. In 2018, during the 7th edition, participants discussed the latest scientific advances and technological innovations, and the virtuous European, international and local initiatives set up to improve the quality of the environment and preserve bee health.
ANSES also offers publications, mainly in digital form, for scientists, professionals, central or local government, and civil society:

- **The Bulletin de Veille Scientifique** is published three times a year, and contains critical analyses of recently-published scientific articles on issues in environmental and occupational health;

- **The Bulletin Épidémiologique**, a quarterly publication produced by ANSES and the Directorate General for Food (DGAL), is a valuable information exchange tool for the players in food safety, animal health and human health. Four to five issues are distributed per year;

- **Euroreference** aims to facilitate the distribution and sharing of information between the different analytical reference players on a European scale. Written in English, this journal is published in electronic form;

- **Vigil’ANSES**, created in 2017, is the four-monthly newsletter on the health vigilance schemes coordinated by ANSES (veterinary pharmacovigilance, nutrivigilance, phytopharmacovigilance, toxicovigilance and vigilance in occupational diseases). It summarises the main results of the work of ANSES and its partners, carried out as part of the vigilance missions;

- **The Cahiers de la recherche** present, in layman’s terms, the results of research projects on major themes funded as part of the National Research Programme for Environmental and Occupational Health. Two to three issues are distributed per year.

Its participation in trade fairs or other events also enables the Agency to address more specific audiences and publicise the results of its expert appraisals and work, by making them more accessible to the general public.

**PARIS INTERNATIONAL AGRICULTURAL SHOW**

Like every other year, ANSES was at the 2018 International Agricultural Show in Paris, an unmissable opportunity for the Agency to meet its partners and the general public and to present its missions. The Agency’s team organised fun but educational scientific presentations and workshops to explain the Agency’s role in safeguarding health and how its actions can affect everyone’s daily lives.
A NEW SERIES OF SCIENTIFIC CONFERENCES

A new series of scientific conferences “ANSES invites...” was launched in 2018, giving the floor to high-level speakers, experts, researchers or academics, all recognised specialists in their discipline, to share their analysis and work on issues related to the Agency’s activities. Three sessions have already taken place:

- “Using 21st Century Science to Improve Risk-related Evaluations”, by Ellen Mantus (National Academies of Sciences, Engineering & Medicine);
- “Perceiving environmental risks: social and political issues”, by Gabrielle Bouleau (Irstea);
- “Measuring the exposome: current applications to understanding the causes of human cancer”, by Christopher Wild, then Director of the WHO’s International Agency for Research on Cancer (IARC).

GREATER EXPLOITATION OF THE LABORATORIES’ ACTIVITIES

In 2018, some 15 news items spotlighted the laboratories and promoted their work. In Boulogne-sur-Mer, the inauguration of the extension to the building provided an opportunity to highlight all the scientific work in the fisheries sector performed by the Laboratory for Food Safety. The 60th anniversary of the Ploufragan-Plouzané-Niort Laboratory, celebrated on 29 November 2018, was a chance to explain the scientific activities carried out by teams whose daily work ensures “One Health and One Welfare”. High-level scientific publications, events or news of appointments all serve to better highlight the diversity and richness of the laboratories’ scientific activities, at local, national, European and international level.

The Agency also once again took part in the Fête de la Science (Science Festival). Workshops and educational events were organised throughout the country with researchers from its nine laboratories.
HUMAN, TECHNICAL AND FINANCIAL RESOURCES
To successfully carry out its missions, the Agency deploys dedicated resources and relies on a wide range of skills. It is committed to uniting its teams around a common project, and acquiring and maintaining high-level scientific skills and equipment. This implies a dynamic human resources policy, a major ongoing training effort, and adequate technical, real-estate and financial resources to meet its requirements. It also needs to adapt its operations to any legal changes and develop a quality approach capable of dealing with the challenges at hand.

SHARING, RAISING AWARENESS AND WORKING BETTER TOGETHER

As part of the ANSES 2025 approach, a working group on common culture and cross-cutting links identified several measures to strengthen the sense of belonging, stimulate exchanges, and develop ways of working more effectively together.

In-house scientific seminars, scientific “coffee klatches” and thematic meetings were organised in 2018 to stimulate exchanges between the teams. Three cross-functional scientific seminars brought together nearly 250 Agency employees on the themes of plant health and protection, antimicrobial resistance and epidemiological surveillance, and enabled the teams to get to know each other better and share their work, thereby strengthening the integrated view of scientific issues within ANSES.

The Agency also conducted several in-house awareness campaigns throughout the year: “Share the road” for gaining a better understanding of the risks and adopting good practices on the road; “Missing type” on blood donation with the French Blood Agency; and “Month without tobacco” with Santé publique France. It continued its work on health and safety (evacuation, posture at work, screen work, carrying heavy loads, etc.), as well as on information system security. From 21 to 23 September 2018, ANSES took part in the first edition of the Ministry of Sport’s Fête du sport (Sports Festival), giving a presentation to high-school students in Maisons-Alfort on diet and physical activity, and organising the “ANSES, my bike and me” initiative, along with other sporting activities carried out with the support of employee associations. As it has done every year since 2015, it also organised a welcome day for new employees. All in-house information is circulated through the weekly internal newsletter, ANSES Hebdo, and the Intranet site.

HUMAN RESOURCES

In 2018, the Human Resources Department strengthened the oversight of employee reviews for each department, in order to:

- maintain and develop the organisation’s flexibility (ability to adapt to new challenges, risk management in terms of loss of skills, etc.);
- define and implement the relevant HR levers (support with career paths, development of key talent, maintaining employee engagement, etc.);
- identify collective training projects.

Individual and collective action plans were introduced: strengthening of mobility, with more than one in two positions being filled internally; implementation of multi-year training schemes (on statistics, epidemiology, toxicology, animal welfare); deployment of a policy to mobilise the Personal Training Account (CPF); individual support for staff wishing to benefit from a specific training scheme.

ANSES makes every effort to maintain rich and constructive labour relations, notably through the implementation of several projects to optimise organisation and structure a “Quality of Life at Work” approach. In terms of preventing psychosocial risks, there were several major initiatives in 2018, carried out with the support of a multidisciplinary team: deployment of teleworking, raising awareness of disability situations through theatre, and the launch of an approach to prevent risky behaviour and conduct.
KEY FIGURES FOR 2018

- 68% → women
- average age → 42 years and 8 months
- 3 meetings of the Committee on Health, Safety and Working Conditions
- 1407 staff working at ANSES
- 2 meetings of the Technical Committee
- 32% → men
- 6 meetings of the Joint Advisory Committee

average age: 6 months
STAFF ELECTIONS
Following the national elections held until 6 December 2018, ANSES’s consultation bodies were renewed on 7 December. The participation rate was 45.76% for the Technical Committee, 39.26% for the Joint Advisory Committee, 59.26% for the Joint Administrative Committee of Research Directors and 37.50% for that of Research Managers.

FINANCIAL RESOURCES
ANSES continued its major investment efforts, which are essential for carrying out its missions.

In 2018, IT expenditure reached €1.6M (commitment appropriations - CA), while the acquisition of scientific equipment accounted for nearly €1.3M (CA). Commitments relating to real-estate work on multi-year operations amounted to €4.3M (CA) and mainly concerned renovation of the Monod building in Maisons-Alfort, construction of the French Agency for Veterinary Medicines building in Fougeres and continuation of work on the Ploufragan-Plouzané-Niort Laboratory sites (Elephants project to upgrade the conventional experimental poultry facilities).
IT, REAL-ESTATE AND TECHNICAL ACHIEVEMENTS

The year was marked by the launch of the new information systems roadmap (SDSI) covering 2018-2021 and completion of the drafting of the multi-annual roadmap for real-estate strategy (SPSI) for 2018-2022.

IT teams

In 2018, the teams mainly focused their efforts on strategic SDSI projects: conducting studies for the second phase of the D-Phy project aimed at fully digitising all MA applications for plant protection products submitted by companies; studies to overhaul the expert appraisal information system with a view to replacing the current system and increasing the efficiency and traceability of the organisation of formal requests; digital management of applications and selection of experts; operational prototype of an electronic archiving system for MAs for veterinary medicinal products, which will constitute a first step towards the implementation of such a system.

The Leila solution, which digitises and unifies the online management of inter-laboratory tests, was deployed and ramped up with the new tests undertaken during the year. More than 20 inter-laboratory tests are being managed by this application, including one at European level and four that have been finalised. They involve about 300 registered laboratories and 1,000 participants.

For the first year of experimentation with teleworking at ANSES, many employees received the technical resources enabling them to work in a mobile situation: computer, headset and microphone, secure network, telecommunications and videoconferencing software.

Maintaining IT security in the face of the emergence of new attack routes remains a permanent concern and led to the Executive Board being consulted. Software applications were approved or re-approved for this purpose. Lastly, the IT teams worked with the Legal Affairs Department on implementation of the General Data Protection Regulation (GDPR).

Real-estate and technical teams

Several large-scale projects are under way with major infrastructure developments.

The joint real-estate project between ANSES and the ANSM is a strong and central thread of the 2018-2022 SPSI. It will consolidate all the laboratory’s activities on ANSES’s Lyon site, at the heart of the “Lyon-Gerland Biodistrict”. Feasibility and planning studies confirmed the project’s scientific and strategic value.

An architectural competition will be launched in 2019, once the financing plan has been finalised.

The extension of the Laboratory for Food Safety on its Boulognesur-Mer site, initiated in 2017, was inaugurated on 14 June 2018. Construction of the new ANMV building in Javené, near Fougeres, is scheduled for completion at the end of 2018 and employees should be moving in during the first quarter of 2019. The multi-year Elephants project of the Ploufragan-Plouzané-Niort Laboratory continued in 2018 with construction and acceptance of the “Broiler poultry precision rearing” building and planning for a “boundary” building between the administrative and breeding areas. This new building, with around 300 m2 of usable area, is designed to accommodate changing rooms, offices and a “field experience” area. Design studies for this project are planned for 2019 and work is scheduled for 2020.

Lastly, in 2018, the study phase of the project to overhaul the Monod building on the Maisons-Alfort site was completed. This operation will help finalise the reorganisation of the Laboratory for Food Safety by bringing the teams of the Microbiology Department together on a single site and, moreover, will improve the building’s technical operation and deploy energy regulation systems to reduce consumption and CO2 emissions. The work will be carried out in five phases over a total period of 24 months, to enable the building to remain in operation.

LEGAL AFFAIRS AND QUALITY APPROACH

Changes in the rules on personal data protection

The General Data Protection Regulation (GDPR) came into force on 25 May 2018. This new legal framework is based in particular on the principle of accountability of each organisation.

ANSES has endeavoured to comply with the GDPR in order to continue guaranteeing the protection of personal data:
- appointment of a Data Protection Officer, whose role includes advising and ensuring full compliance with the GDPR at the Agency;
- updating the register of processing operations, which lists the personal data processing operations carried out by ANSES;
- updating internal procedures to take changes in regulations into account;
- raising awareness among teams at the headquarters and laboratories of the changes introduced by the GDPR.

**Finalisation of the ANMV archives management table**

This table identifies all the documents or groups of documents produced and received by the ANMV’s specialist departments and determines each one’s storage time and ultimate fate (destruction or transfer to the National Archives). This project, which the Legal Affairs Department has been working on for several years, was completed in preparation for the ANMV’s move.

**External recognition of the quality management system**

Following the ISO 9001 surveillance audit, the Agency maintained certification of its quality management system without any non-compliance being reported. This enabled the Agency to demonstrate its ability to provide products and services that meet its stakeholders’ expectations and the high standards it asserts (which are binding on it), but also to demonstrate the effectiveness of its system.

In 2018, ANSES began accrediting the activities of its laboratories according to the new version of the ISO 17025:2017 standard. The Plant Health Laboratory (unit for pests and pathogens of tropical plants in Reunion Island), Ploufragan-Plouzané-Niort Laboratory, Nancy Laboratory for Rabies and Wildlife, and Nancy Laboratory for Hydrology were all accredited without any critical non-compliances.

**Sustainable development**

The Agency took part in the PAP50 survey conducted by the WWF for the environmental assessment of paper use policies in public or private organisations. The Agency was ranked first among the public bodies responding. This diagnosis helped consolidate practices and identify areas for improvement.

**Internal Audit Committee**

In 2018, the Agency organised the first meetings of its Internal Audit and Risk Management Committee, which reports to its Board of Administrators. The committee is responsible for supervising ANSES’s work programme with regard to internal auditing and risk management.
COMPOSITION OF THE ANSES BOARD OF ADMINISTRATORS
CHAIR
MR LUC DEREPAS

VICE-CHAIR
PIERRE-YVES MONTÉLÉON

GOVERNMENT REPRESENTATIVES

» Director General for Health
» Director General for Risk Prevention
» Director General for Labour
» Director General for Food

» Director General for Competition,
  Consumer Affairs and Fraud Control
» Director for the Budget
» Director General for Research and Innovation
» Director General for Enterprise

REPRESENTATIVES OF ASSOCIATIONS

■ REPRESENTATIVES OF ENVIRONMENTAL PROTECTION ASSOCIATIONS
  Member » Mr Pierre Benoît, France Nature Environment
  Proxy » Mr Alain Chabrolle, France Nature Environment
  Member » Mr Jacky Bonnemains, Robin des Bois, NGO for the Protection of Man and the Environment
  Proxy » Ms Charlotte Nithart, Robin des Bois, NGO for the Protection of Man and the Environment

■ REPRESENTATIVES OF STATE-CERTIFIED CONSUMER ADVOCACY GROUPS
  Member » Mr Jean-Yves Mano, French Confederation for Consumer Affairs, Housing & Quality of Life (CLCV)
  Proxy » Mr Étienne Defrance, Force Ouvrière Consumers’ Association
  Member » Mr Hubert Vermeersch, National Confederation of Catholic Family Associations (CNAFC)
  Proxy » Ms Claudine Lemer, Familles Rurales

■ REPRESENTATIVES OF STATE-CERTIFIED ASSOCIATIONS ACTIVE IN THE FIELD OF QUALITY OF HEALTH AND CARE OF THE SICK
  Member » Ms Madeleine Madoré, Le Lien Association
  Proxy » Ms Marie-Agnès Besnard, National Union of Family Associations

■ REPRESENTATIVES OF SUPPORT ASSOCIATIONS FOR VICTIMS OF OCCUPATIONAL ACCIDENTS OR DISEASES REPRESENTED ON THE FRENCH COMPENSATION FUND FOR ASBESTOS VICTIMS
  Member » Mr Alain Prunier, National Federation of Injured and Disabled Workers (FNATH)
  Proxy » Ms Michèle Chataigner, National Federation of Injured and Disabled Workers (FNATH)
  Member » Mr François Desriaux, National Association for the Defence of Victims of Asbestos (ANDEVA)
  Proxy » Mr Guy Talès, National Association for the Defence of Victims of Asbestos (ANDEVA)
REPRESENTATIVES OF PROFESSIONAL ORGANISATIONS

3rd COLLEGE

Member  Mr Thierry Coué, National Federation of Farmers’ Unions (FNSEA)
Proxy  Mr Louis Cayeux, National Federation of Farmers’ Unions (until June 2018)

Member  Mr Gérard Boivin, National Food Industry Federation (ANIA)
Proxy  Mr Hervé Lafforgue, National Food Industry Federation (ANIA)

Member  Mr Hervé Gomichon, Federation of Trade and Retail Companies (until September 2018)
Proxy  Ms Isabelle Bricard, General Confederation of Food Retailers

Member  Mr Jean-Louis Hunault, French Union for the Veterinary Medicinal Product & Reagent Industry (SIMVR)
Proxy  Mr Jacques Bonin, French Union for the Veterinary Medicinal Product & Reagent Industry (SIMVR)

Member  Mr Philippe Prudhon, French Chemical Industries Union
Proxy  Ms Eugénia Pommaret, French Crop Protection Industry Association (UIPP)

Member  Mr Jean-François Loret, Professional Federation of Water Companies (FPEE)
Proxy  Mr Yannick Beneba, Professional Federation of Water Companies (FPEE)

REPRESENTATIVES OF EMPLOYEE TRADE UNION ORGANISATIONS AND INTER-BRANCH EMPLOYERS’ ORGANISATIONS

4th COLLEGE

■ REPRESENTATIVES OF EMPLOYEE TRADE UNION ORGANISATIONS

Member  Ms Edwina Lamoureux, French Democratic Labour Confederation (CFDT)
Proxy  Ms Soraya Duboc, French Democratic Labour Confederation (CFDT)

Member  Mr Bernard Salengro, French Confederation of Management - General Confederation of Executives (CFE-CGC)
Proxy  Mr Christian Expert, French Confederation of Management - General Confederation of Executives (CFE-CGC)

Member  Mr Pierre-Yves Montéléon, French Confederation of Christian Workers (CFTC)
Proxy  Mr Jean-Michel Cerdan, French Confederation of Christian Workers (CFTC)

Member  Mr Alain Delaunay, General Confederation of Labour (CGT)
Proxy  Ms Hélène Courtin, General Confederation of Labour (CGT)

Member  Mr Jean Paoli, General Confederation of Labour - Workers’ Force (CGT-FO)
Proxy  Ms Justine Braesch, General Confederation of Labour - Workers’ Force (until July 2018)

■ REPRESENTATIVES OF INTER-BRANCH EMPLOYERS’ ORGANISATIONS

Member  Mr Pierre Thillaud, General Employers’ Confederation for Small and Medium Enterprises (CGPME)
Proxy  Mr Philippe Chognard, General Employers’ Confederation for Small and Medium Enterprises (CGPME)

Member  Mr Frank Garnier, French Employers’ Confederation (MEDEF)
Proxy  Mr Cyril Gallet, French Employers’ Confederation (MEDEF)

Member  Ms Sandrine Bize, Union of Neighbourhood Businesses
Proxy  Ms Anne Novak-André, Union of Neighbourhood Businesses
5th COLLEGE

ELECTED OFFICIALS

Member  Ms Isabelle Maincion, representing the Association of Mayors of France, Mayor of La Ville aux Clercs
Proxy  Mr Gilles Pérole, representing the Association of Mayors of France, Deputy Mayor of Mouans-Sartoux

Member  Ms Josiane Lei, representing the Assembly of French Départements, Vice-President of the General Council of Haute-Savoie
Proxy  Mr Raymond Girardi, representing the Assembly of French Départements, Vice-President of the General Council of Lot-et-Garonne

QUALIFIED INDIVIDUALS

Member  Mr Christophe Brard, Veterinary Doctor, President of the French National Society of Veterinary Technical Groups
Proxy  Ms Janine Guaguère, Veterinary Doctor, Elected Member of the Veterinary Association National Council

REPRESENTATIVES OF AGENCY PERSONNEL

Member  Ms Nathalie Thieriet
Proxy  Ms Corinne Sévin

Member  Mr Ludovic Le Hégarat
Proxy  Ms Katell Rivoal

Member  Mr Michel Laurentie
Proxy  Mr Bertrand Lombard
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<th>GLOSSARY</th>
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<tr>
<td>ADEME: French Agency for Environment and Energy Management</td>
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<td>ACTA: Association for the coordination of agricultural methods</td>
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<td>ACTIA: French network of technical institutes in the food industry</td>
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<td>ANIA: French National Association of Food Industries</td>
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<td>ANSM: French Health Products Safety Agency</td>
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<td>APCA: Network of French Chambers of Agriculture</td>
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<td>CA: Commitment appropriation</td>
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<td>MA: Marketing authorisation</td>
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<td>ANMV: French Agency for Veterinary Medicinal Products</td>
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<td>ANR: French Research Agency</td>
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<td>AVIESAN: French National Alliance for Life Sciences and Health</td>
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<tr>
<td>BfR: Bundesinstitut für Risikobewertung (German Federal Institute for Risk Assessment)</td>
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<tr>
<td>CGAD: French General Confederation of Food Retailers</td>
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<td>CLP: European Regulation on classification, labelling and packaging of chemicals and their mixtures</td>
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<td>PA: Payment appropriation</td>
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<tr>
<td>COP: Goals and performance contract</td>
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<tr>
<td>COT: Thematic steering committee</td>
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<tr>
<td>PDI: Public declaration of interests</td>
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<td>DGAL: French Directorate General for Food</td>
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<td>DGCCRF: Directorate General for Competition,</td>
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<td>OMAA: Observatory for honeybee mortality and alerts</td>
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<td>ONCFS National Office for Hunting and Wildlife</td>
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<td>ASF: African swine fever</td>
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<td>REACh: European Regulation on the registration, evaluation and authorisation of chemicals</td>
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<td>GDPR: General Data Protection Regulation</td>
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<td>TRV: Toxicity reference value</td>
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<td>SDHI: Succinate dehydrogenase inhibitor</td>
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