

Management of animal diseases under a *One Health* approach

**The case of highly pathogenic avian influenza (HPAI)
in questions/answers**



January 2026

In June 2025, the European Commission conducted a mission to France entitled: '*Information study to identify good practices and policy gaps in a One Health approach to reduce potential risks to animals, the environment and humans from avian influenza virus*'.

The three-week mission took place in Paris (Ministry of Agriculture and Ministry of Health), in two regions (Pays-de-la-Loire and Nouvelle-Aquitaine) and in two departments (Vendée and Gironde). It allowed the European Commission to meet all the main stakeholders and actors in the prevention, surveillance and control of avian influenza, a zoonotic disease, which affects wild and domestic animals, birds (including seabirds and migratory birds) but also many species of mammals.

During this mission, the European auditors paid particular attention to the following:

- the effectiveness of communication and collaboration between public health, animal health and environmental authorities in preventing and controlling the risks associated with avian influenza (the name of this disease in humans);
- resources necessary for the implementation of all activities required for the prevention and control of outbreaks of HPAI in poultry, including vaccination against HPAI (HPAI: highly pathogenic avian influenza, name of the disease in animals);
- implementation and verification of biosecurity and prevention measures;
- the monitoring program for non-bird species and the use of these monitoring data in risk assessments and risk mitigation measures;
- the implementation of the emergency plan for the control and eradication of avian influenza;
- the effectiveness of the analysis of epidemiological data and the associated decision-making process.

The European Commission is conducting a series of missions to several Member States to study the management of HPAI under a '*One Health*' approach. The context that led to the organisation of these missions is that in recent years several epizootic waves of HPAI have had a major health, psychological, social and economic impact on the national poultry sector in many Member States and have led to significant direct and indirect economic and societal costs for the European Union.

In order to prepare its mission to France, the European Commission sent the French authorities a comprehensive questionnaire on the implementation in France of the *One Health* approach in the management of HPAI.

This is the full questionnaire and the replies provided by France to the European Commission that you will find in this document (parts 1, 2 and 4). Part 3 of this document corresponds to part of the questions/answers provided to the European Commission from a second questionnaire specific to the Commission's audit mission in June 2025 to France.

This document thus values and capitalises on the work and achievements of the various stakeholders involved in the management of this zoonotic disease, which has a major impact on the health of domestic poultry and on biodiversity as a result of its consequences for wildlife.

For the Ministry of
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The following map provides a schematic overview of the main French structures involved in the surveillance, prevention and control of highly pathogenic avian influenza (HPAI).

Highly Pathogenic Avian Influenza (HPAI): « One Health / Une seule santé » actors

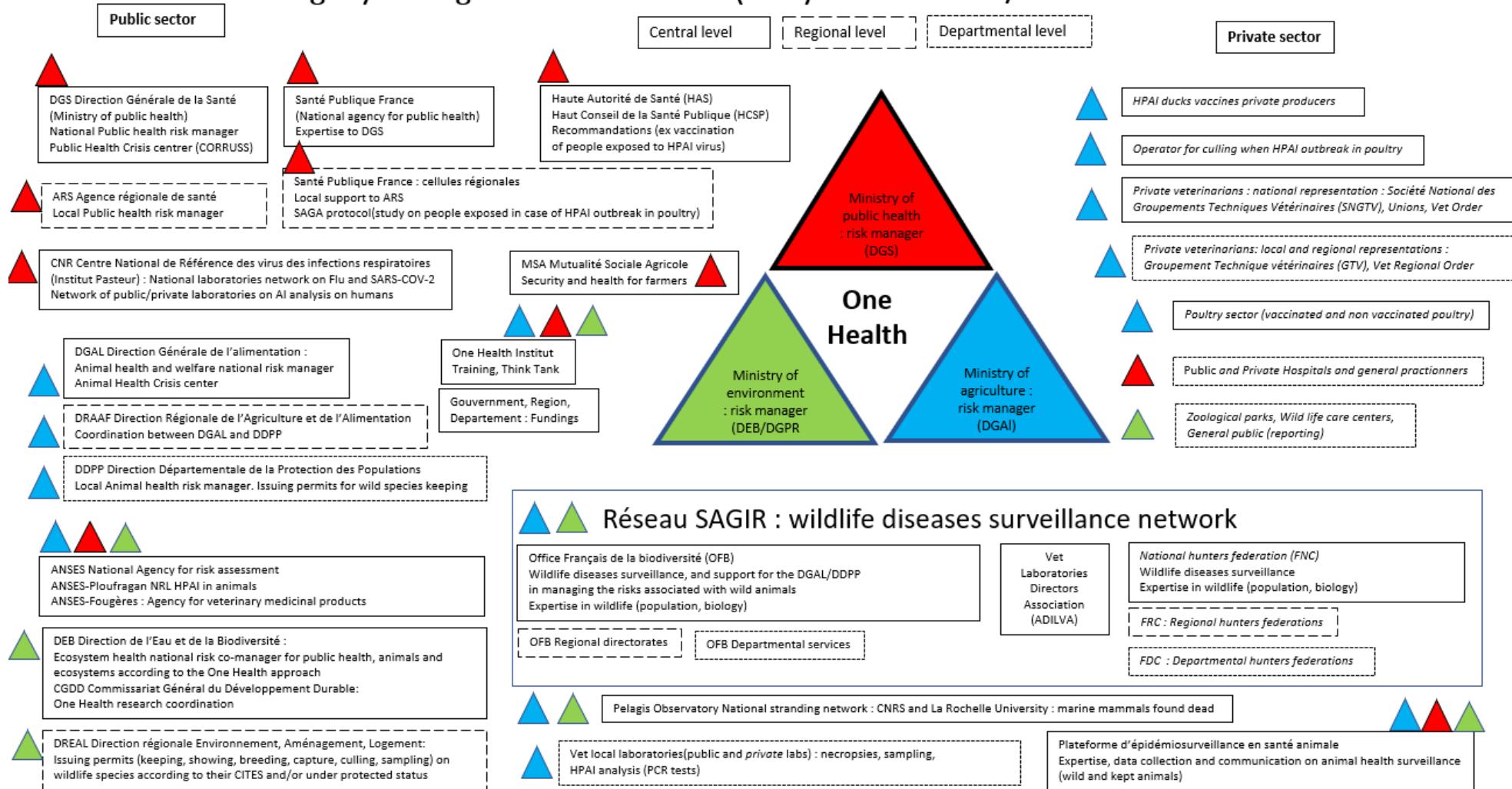


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1. Health of ecosystems

Q1. Who is the competent authority for the conservation of biodiversity and wildlife?

This is the Ministry in charge of the environment, and more specifically the Directorate for Water and Biodiversity (DEB):

- <https://www.ecologie.gouv.fr/direction-generale-lamenagement-du-logement-et-nature-dgaln-0>

The technical responsibility for animal health, on the other hand, lies with the Ministry of Agriculture, which is the expert authority on animal health.

Q2. Are there wildlife rehabilitation centres in France and what authority is responsible for them?

One hundred wildlife care centers are listed on the territory. They are organised into two federations:

- the French Union of Wildlife Conservation Centres: <https://www.faunesauvage.fr/fsstructure/union-francaise-des-centres-de-sauvegarde-de-la-faune-sauvage>
- the Network of Wildlife Care Centres in France: <https://www.reseau-soins-faune-sauvage.com/>

Wildlife care centres are subject to a permit to open and must have a person holding a certificate of capacity in accordance with the Environmental Code. The central competent authority is the Ministry responsible for the environment (Directorate for Water and Biodiversity).

Their authorisation to open and the certificates of capacity are issued by prefectoral delegation by the departmental directorates responsible for the protection of populations (DDecPP), which also carry out checks in these establishments.

Wildlife care centres must also appoint a health veterinarian. The amended Order of 11 September 1992, co-signed by the Ministries of Agriculture and the Environment, lays down the general operating rules and the characteristics of the facilities of establishments that care for wild animals (<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000541669/2025-10-23>).

A report by the Ministry of the Environment of 28 April 2023 provides additional descriptive information on wildlife care centres:

- <https://www.igedd.developpement-durable.gouv.fr/amelioration-de-la-situation-des-centres-de-soins-a3572.html>

Q3. Are you actively monitoring the situation of avian influenza epizootics beyond your national territory?

International health monitoring is carried out continuously by the national epidemiosurveillance platform:

- <https://www.plateforme-esa.fr/fr>

The National Influenza Reference Laboratory (NRL IA: ANSES de Ploufragan) participates in the editorial board of this newsletter.

ADIS and WAHIS data, Promed dispatches and media information are analysed and put into perspective in the weekly international health watch bulletins.

Q4. Have you developed a risk assessment and/or risk mitigation policy after considering the risks and possible consequences of HPAI and low pathogenic avian influenza (LPAI) for the wildlife concerned, taking into account the latest recommendations of the Scientific Working Group on Avian Influenza and Wild Birds, Council Directive 92/43/EEC and Directive 2009/147/EC?¹

ANSES received a referral on 17 January 2020 from the Ministry of Agriculture (DGAL) on the risk assessment relating to the burial of cadavers from farm animals and/or wildlife. ANSES provided an opinion and a collective expert report in 2022:

- <https://www.anses.fr/fr/content/avis-et-rapport-de-lances-relatif-levaulation-du-risque-relatif-lenfouissement-de-cadavres>

For example, during the HPAI outbreak that affected a colony of protected birds (Northern gannets) in the Sept-Iles reserve in Brittany, managed by the *Ligue de protection des oiseaux* (an association for nature protection), measures to monitor bird populations were implemented.

Another example: management measures were carried out on the *Ile aux moutons* (Glénan Archipelago in Brittany) following tern mortality in 2023: removal of cadavers, managed by the French Office for Biodiversity (OFB) with the technical support of the Association Bretagne Vivante.

Finally, as part of the epizootic in the French Southern and Antarctic Lands (TAAF), which started in October 2024, an epidemiological expert committee for the management of this epizootic has been set up to monitor the evolution of this disease, which is responsible for the mass mortality of elephant seals and royal penguins.

¹ [Directive 2009/147/EC](https://eur-lex.europa.eu/eli/dir/2009/147/oj) on the conservation of wild birds

Q5. Surface water can be potentially contaminated in areas where animal influenza viruses circulate. Viable influenza viruses can persist for long periods of time in water and on wet surfaces. Have you identified potential water reservoirs, in particular those located in high-density farming areas, and considered measures to be taken in the event of an outbreak of highly pathogenic avian influenza to reduce the risk of contamination?²

To date, no monitoring is envisaged in surface waters such as ponds, lakes, etc. Epidemiological monitoring in waste water is the subject of various projects in France (example: the Sum'eau project). Its application to influenza virus surveillance is currently being studied.

Q6. What procedure, if any, is in place for the regular sharing of information and reports with other competent authorities, international organisations (Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), Convention on the Conservation of Migratory Species of Wild Animals (CMS), Convention on Wetlands (RAMSAR), research organisations and other important stakeholders such as the Pan-European Common Bird Monitoring Programme (PECBMS) or Birdlife?

The monitoring of HPAI on wildlife is reported to the European Food Safety Authority (EFSA). Information sharing on the situation in the French Southern and Antarctic Lands (TAAF) took place with the Paul Emile Victor Institute (IPEV) and the Centre for Functional and Evolutionary Ecology of the Centre national de recherche scientifique (CNRS).

When marine mammals are suspected, an exchange with the European national stranding networks is ensured by the Pelagis Observatory:

- <https://www.observatoire-pelagis.cnrs.fr/>

At national level, information sharing takes place between the French Biodiversity Office (OFB: <https://www.ofb.gouv.fr/>), wildlife care centres and zoos via AFVPZ (French-speaking Association of Zoo Veterinarians : <https://afvpz.com/>).

Wildlife health issues take place every two months as part of international health monitoring. In addition, the Monitoring Group on Wildlife Health Surveillance of the Animal Health Epidemiological Surveillance Platform meets twice a year. This group includes experts from the Ministry in charge of the environment, researchers from ANSES, OFB, the National Veterinary School of Toulouse, the Pelagis Observatory and experts from various wildlife care centres.

There is no formalised reporting to the Ministry in charge of the environment, nor to the European schemes involved.

² [Public Health Resource Kit for Countries Affected by Animal Influenza Epidemics: revised guidelines \(who.int\)](http://www.who.int/)

Q7. Are you involved in the procedures for the disposal of carcasses from infected poultry establishments or wild bird carcasses?

Yes, local veterinary authorities (Departmental Directorates for Population Protection/DDPP) ensure compliance with the provisions laid down in Article 12 of Delegated Regulation (EU) 2020/687 on rules for the prevention and control of certain animal diseases.

In addition, operators handling infected poultry carcasses are made aware of and responsible for the preventive instructions to be followed, in particular the wearing of personal protective equipment (PPE) recommended by the public health authorities.

Q8. What are the responsibilities of actors in the event of mass mortalities of suspect or HPAI-infected wild animals?

The services of the French Office for Biodiversity (OFB), as well as the Departmental hunting federations (FDC) and the managers of nature reserves, carry out, in addition to the collection of cadavers of wild animals for analysis, a count of bird mortality within the framework of the SAGIR network for monitoring the state of health of wild animals.

Due to the zoonotic potential of the HPAI virus, and therefore the risk to human health, reminders will be given to individuals by prefectures and town halls about the importance of not approaching, touching nor transporting sick birds.

The cadavers of wild birds are taken care of by municipal officials in compliance with biosecurity instructions (use of PPE, FFP2 masks), who will be able to call on a rendering company as part of the public rendering service for lots greater than 40 kg.

The collection of animal carcasses from bird colonies is assessed on a case-by-case basis, due to the risk of dispersal of animals and therefore spread of the virus and also the significant disturbance of birds, including breeding colonies.

Outdoor activities (hiking, hunting, fishing...) can be regulated by prefects, or even prohibited.

The DD(ETS)PP reminds wildlife care centres of the need to ensure that the biosecurity measures necessary to prevent the spread of the virus and the contamination of other animals therein are respected.

The DD(ETS)PP reminds keepers of poultry and captive birds of the need to comply with biosecurity measures, which are essential to protect their animals, the sheltering of poultry and captive birds and the prohibition of bird gatherings, imposed by the high level of risk. In their communication, the DD(ETS)PPs highlight the website of the Ministry of Agriculture (<https://agriculture.gouv.fr/tout-ce-qu'il-faut-savoir-sur-linfluenza-aviaire>) and mention the brochure '*Farmers of poultry: regulatory requirements to protect your livestock from health hazards*' (this brochure is available on the website of the Ministry of Agriculture).

In the event of direct exposure to these animals, people are reminded, by the regional health agencies (ARS) with Public Health France/*Santé publique France (SpF)*, of the need to monitor their state of health for 10 days after being exposed. If symptoms occur during this period (fatigue, fever, aches, headaches, runny nose, cough, red eyes, difficulty breathing, disorientation, dizziness, etc.), the person must consult a doctor without delay, mentioning the risk exposure.

Those affected by direct exposure to these animals are encouraged to vaccinate against human influenza.

2. Public health

Q9 Please provide information on awareness campaigns and training on health and safety related to avian influenza for health professionals (i.e. doctors, nurses, health workers, human health professionals at all levels – primary care, secondary care, public and private) on personal protective equipment, vaccination awareness, administration of antivirals and risk minimisation strategy.

The High Council of Public Health (HCSP) has regularly met its recommendations regarding the prevention of human infections with avian or porcine influenza virus (both for people exposed to an animal or environmental source, and for health professionals), as well as the management of suspected or confirmed cases of zoonotic influenza.

The opinions also produce a summary of the virological, clinical and epidemiological knowledge available on these viruses.

The December 2021 opinion is available on the HCSP website:

- <https://www.hcsp.fr/Explore.cgi/AvisRapportsDomaine?clefr=667>

A new opinion drafted and validated in May 2025 updates the 2021 opinion. It is also available on the HCSP website:

- <https://www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=1434>

The notices are public and available on the HCSP website.

Public Health France (*Santé publique France – SpF*) : an administrative public institution under the supervision of the Ministry of Health) drafted and distributed very widely in 2023 an information leaflet on avian and porcine influenza viruses, the risk they pose to human health and how to protect against them (including personal protective equipment to be worn in the event of exposure), as well as on the action to be taken in the event of risk exposure and the occurrence of symptoms thereafter. This leaflet has been designed and distributed in conjunction with the Directorate-General for Health (DGS/Ministry of Health), the Directorate-General for Food (DGAL/Ministry of Agriculture), ANSES (National Agency for Health Risk Assessment), the French Office for Biodiversity (OFB), the National Reference Centre for Respiratory Viruses (CNR VIR) and the *Mutualité sociale agricole* (MSA).

This leaflet is available on the Public Health France/*Santé publique France* website:

- <https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-transmissibles-de-l-animal-a-l-homme/grippe-aviaire/documents/depliant-flyer/les-bons-reflexes-face-aux-grippes-aviaire-et-porcine>

This leaflet primarily targets the general public and particularly people who may be exposed to an avian or porcine influenza virus. It has also been widely disseminated to health professionals to raise awareness. In addition, Public Health France/*Santé publique France* is finalising the development of a leaflet targeting only health professionals on how to deal with a suspected case of zoonotic influenza.

This specific leaflet will be widely distributed to all health professionals and is already available at the following address:

- <https://www.santepubliquefrance.fr/content/download/765705/4843100?version=1>

The national mission COREB (Operational Coordination of Epidemic and Biological Risk: <https://www.coreb.infectiologie.com>) regularly updates a fact sheet for healthcare professionals on zoonotic influenza, in order to inform them about the clinical and epidemiological criteria for suspecting zoonotic influenza, the arrangements for hospital care of these patients, the hygiene and prevention measures to be implemented by healthcare professionals taking care of them. This sheet was updated in 2025, following the update of *Public Health France*'s passive surveillance protocol for zoonotic influenza.

The national mission COREB is entrusted by the Ministry in charge of health to ensure the animation of the network of reference health institutions (ESR) for epidemic and biological risk (REB). The mission accompanies the actors of clinical care (infectiologists, emergency physicians, hygienists, resuscitors, pediatricians but also general practitioners), microbiologists, REB trainers, etc.

The COREB mission's 'zoonotic influenza vigilance' datasheets are available on the website:

- <https://www.coreb.infectiologie.com/fr/grippes-zoonotiques.html>
- <https://www.coreb.infectiologie.com/UserFiles/File/20250703-grippes-zoonotiques-coreb.pdf>

The COREB mission also organised two webinars on the HPAI situation in 2023 and 2025. The 2025 webinar was mainly addressed to the COREB and COCLICO networks (network of clinicians outside the ESRs) and was more broadly open to other healthcare professionals. It brought together more than 280 people. A summary and a Frequently Asked Questions were disseminated following this webinar.

Finally, the Sentinels network (a network of more than a thousand general practitioners and paediatricians spread throughout the French metropolitan territory), in conjunction with Public Health France/*Santé publique France*, sent a communiqué in January 2023 to its entire network providing information on the situation in relation to zoonotic influenza and the action to be taken in the event of a suspicion of zoonotic influenza recommended by Public Health France/*Santé publique France*.

This communication from Public Health France entitled 'Monitoring and investigation of cases of human influenza due to an influenza virus of avian or porcine origin' appears on the COREB mission website:

- <https://www.coreb.infectiologie.com/UserFiles/File/evenements/webinaires/20250207-coreb-coclico-point-de-situation-h5n1.pdf>

The highly pathogenic avian influenza virus (HPAI) H5N1 has been responsible for an influenza panzootic in birds for some years. Currently, the circulation of the virus is reaching unprecedented levels, especially in the United States, where many cattle are infected and several dozen human cases have been detected since 2024. This health situation raises concerns about the possible adaptation of the virus to humans.

In this context, the Directorate-General for Health (Ministry in charge of Health) has referred the matter to the High Authority for Health (HAS) in order to draw up recommendations in

advance on the pre-pandemic vaccination strategy to be adopted in the event of the detection of a human case, whether indigenous or imported, of zoonotic influenza in the territory, and specifies the population groups for which vaccination is prioritised.

On 8 April 2025, the HAS issued recommendations to public decision-makers entitled 'H5N1 zoonotic influenza, Vaccine strategy in pre-pandemic situations', which can be consulted on the HAS website:

- https://www.has-sante.fr/jcms/p_3599828/fr/grippe-zoonotique-h5n1

The HAS also revised its pandemic influenza vaccine strategy and made it available on its website:

- https://www.has-sante.fr/jcms/p_3636256/fr/pandémie-grippale-revision-de-la-strategie-vaccinale

Q10. Please provide information on health and safety awareness campaigns and training on avian influenza for occupational groups at risk, namely livestock depopulation workers, slaughterhouse workers, farmers, veterinarians, laboratory staff, pet owners, farm workers, hunters, seabird keepers and other wildlife professionals.

DGAL (Ministry of Agriculture), ANSES, the French Office for Biodiversity (OFB) and *Mutualité Sociale Agricole* (MSA) regularly update and disseminate information sheets on HPAI for the attention of those exposed. The National Federation of Hunters disseminates in its network the communication media of the DGAL that may affect hunters.

Some examples of communication media:

- The 'Avian Influenza or Influenza' form on the website of the Ministry of Agriculture with the *Mutualité Sociale Agricole* (MSA): <https://agriculture.gouv.fr/fiches-zoonoses>
- Communication from the *Mutualité sociale agricole* (MSA) with Public Health France/Santé publique France to workers in the agricultural and agri-food sector and their employers:
<https://ssa.msa.fr/document/les-bons-reflexes-face-aux-grippes-aviaires-et-porcines/>
- Communication from ANSES to the general public:
<https://www.anses.fr/fr/content/linfluenza-aviaire-en-11-questions>
- Communication from the French Biodiversity Office (OFB) to the general public and hunters:
<https://www.ofb.gouv.fr/ce-quil-faut-savoir-sur-linfluenza-aviaire>
- Communication from the CRBPO (Bird Population Biology Research Centre):
<https://crbpo.mnhn.fr/actualites/messages/article/recommandations-relatives-a-la-prevention-de-la-grippe-aviaire>
<https://www.ofb.gouv.fr/ce-quil-faut-savoir-sur-linfluenza-aviaire>

In addition, the official veterinary services at departmental level (DDecPP) distribute these platelets to breeders whose livestock have been affected by HPAI since the 2023-24 season.

In addition, veterinary practitioners in the RESAVIP network (pig influenza surveillance) distribute these platelets to farmers who have applied to their veterinarian for influenza-like illnesses in their pigs since winter 2024-25.

Participants in the SAGIR network (OFB and FDC) receive biosecurity instructions when co-reading wild animals.

OFB officers are encouraged to be vaccinated against seasonal influenza to reduce the risk of reassortment. This was done in autumn 2025.

Naturalists and banders also receive recommendations from the CRBPO (Centre for Research on the Biology of Bird Populations, platform of the National Museum of Natural History). These recommendations can be consulted on the CRBPO website:

- <https://crbpo.mnhn.fr/actualites/messages/article/recommandations-relatives-a-la-prevention-de-la-grippe-aviaire>

Certain viruses responsible for avian influenza are classified in risk group 3 for infection by the Ministerial Order of 16 November 2021: highly pathogenic avian influenza (HPAI) virus A(H5), HPAI virus A(H7) and low pathogenic avian influenza (LPAI) virus A(H7N9). Therefore, approved laboratories handle samples likely to be contaminated with avian influenza virus in premises with a level of biosecurity NSB3, as provided for in the Order of 16 July 2007 laying down technical measures for prevention, including containment, to be implemented in laboratories for pathological research, teaching, analysis, anatomy and cytology, autopsy rooms and industrial and agricultural establishments where workers are likely to be exposed to pathogenic biological agents. This decree can be consulted on the following link:

- <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000000465273/2025-10-23>

This is an obligation for all laboratories approved for virological detection of avian influenza viruses. These instructions are also recalled in the Technical Instruction of the Ministry of Agriculture DGAL/SDPRS/2023-421 on the provisions applicable to the network of approved laboratories for the detection of avian influenza virus genomes by real-time RT-PCR method. This instruction can be consulted at:

- <https://info.agriculture.gouv.fr/boagri/instruction-2023-421>

Q11. Please provide information on any public awareness campaigns on the risks of spread of avian influenza by birds and mammals, possible symptoms and ways to report them.

The leaflet on zoonotic influenza distributed by Public Health France/*Santé publique France* in 2023 focuses on these themes (see answer to question Q10).

In addition, a thematic file on avian influenza is regularly updated on the website of Public Health France/*Santé publique France*, with news published as needed (update of knowledge, notable international news, update of the action to be taken, etc.). A relay of these news is done on social networks.

This thematic dossier on avian influenza is available on the Public Health France website:

- <https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-transmissibles-de-l-animal-a-l-homme/grippe-aviaire>

On 6 February 2025, a press conference on the HPAI situation and the measures taken by France was given jointly by the Ministry in charge of Health (DGS), the Ministry in charge of Agriculture (DGAL), Public Health France and the Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail (ANSES), followed by a press release, with relays on social networks and the website of Public Health France.

Indeed, in recent months, there has been an increase in cases of transmission of HPAI viruses to humans at international level. It was in this context that DGS, DGAL, Public Health France/*Santé publique France* and ANSES met to present their cooperation to the press. A new press conference on this topic was held on 27 November 2025.

Details of this press conference of 6 February, which is common to both ministries, can be found on the website:

- of the Ministry of Agriculture:
<https://agriculture.gouv.fr/iahp-les-autorités-sanitaires-françaises-mobilisées-face-au-risque-de-circulation-d'un-virus-adapte>
- of Public Health France:
<https://www.santepubliquefrance.fr/presse/2025/virus-influenza-aviaire-hautement-pathogène-iahp-les-autorités-sanitaires-françaises-poursuivent-leurs-actions-et-renforcent-leur-coopération-f>

As regards influenza in pigs, the ANSES website includes a page entitled 'Influenza in pigs, a problem for farms and human health':

- <https://www.anses.fr/fr/content/grippe-porc-problematique-elevages-sante-humaine>

This page includes links to three documents:

- a 'Pig Influenza' sheet (pig flu);
- a fact sheet entitled 'Good reflexes in the face of avian and swine flu';
- a 'Pig flu influenza virus: Avoid transmission between animals and humans.'

Q12. Please provide information on seasonal influenza vaccination protocols. Have you put in place specific measures for workers at risk (e.g. staff working in poultry farming, veterinarians, etc.)?

Vaccination against seasonal influenza has been recommended for professionals exposed to avian and porcine influenza viruses since the 2022-23 season, following an opinion from the High Authority of Health (HAS) in spring 2022. This seasonal influenza vaccination is fully reimbursed by the State.

DGS and DGAI are working with the health insurance services to bring these provisions to the attention of the different categories of beneficiaries.

This 2022 HAS opinion is available at:

- https://www.has-sante.fr/upload/docs/application/pdf/2022-04/avis_n2022.0022.sespev_du_7_avril_2022_du_college_de_la_has_relatif_a_1_edition_2022_du_calendrier_des_vaccinations.pdf

Q13. Please provide information on the available guidelines for the use of pre- and/or post-exposure antiviral prophylaxis and indicate whether appropriate antiviral medicinal products are available in sufficient quantities to be administered.

The 2021 HCSP Opinion (see reply to Q9) made recommendations on the management of zoonotic influenza with antivirals.

The COREB mission factsheet on zoonotic influenza also mentions the drug management of confirmed cases (see reply to Q10).

Q14. Please provide information on the information provided to the public and certain professionals in order to improve the reporting of possible cases of avian influenza in humans (doctors, veterinarians and other high-risk occupational groups).

Public Health France's leaflet on zoonotic influenza (see answer to question Q10) aims to make people at risk aware of monitoring their health and to consult a doctor without delay in the event of symptoms.

Regular updates on the action to be taken in the event of zoonotic influenza from Public Health France/*Santé publique France* are followed by a specific communication from the DGS to health professionals and ARS, in order to inform them and raise their awareness of the importance of early detection and reporting of zoonotic influenza cases.

Q15. Please provide information on screening protocols/instructions when relevant clinical signs are detected in primary and secondary care facilities.

The surveillance protocol for zoonotic influenza is detailed in the action to be taken by Public Health France/*Santé publique France* (updated in 2025) and its content is recalled in the COREB sheet.

Link to COREB fiche:

- <https://www.coreb.infectiologie.com/UserFiles/File/20250220-grippes-zoonotiques-corebdef.pdf>

Q16. Please provide information on targeted active surveillance programmes to identify avian influenza.³

Public Health France developed an active surveillance protocol for people exposed to HPAI outbreaks in livestock farming with its partners (Anses, CNR VIR, DGAL and DGS) in 2023, the SAGA protocol (Active Surveillance of Avian Influenza).

For more information on the SAGA protocol:

- <https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-transmissibles-de-l-animal-a-l-homme/grippe-aviaire/notre-action>

During the winter of 2023-24, a SAGA pilot was conducted in 4 French regions (most affected by HPAI: Brittany, Pays de la Loire, Occitanie and Nouvelle-Aquitaine), followed by feedback with all stakeholders in autumn 2024. Three of the eight outbreaks detected in poultry farming during the study period were investigated: two partially or fully vaccinated duck farms in the Pays de la Loire region (Vendée), and one turkey farm in the Brittany region (Morbihan). In total, of the 16 asymptomatic people who were identified as having been exposed to these outbreaks and who were contacted by Public Health France/*Santé publique France*, 15 agreed to participate in the investigations (nasopharyngeal sampling carried out in the laboratory of biomedical proximity analyses and H5 screening by RT-PCR carried out by the CNR VIR). None of them were found positive for an HPAI virus.

The SAGA pilot was re-conducted in the same regions during the 2024-25 season in slightly different ways (full laboratory screening of proximity biomedical analyses, with nasopharyngeal sampling and RT-PCR testing targeting type A influenza). Two of the 15 outbreaks of HPAI in poultry farms detected during this season were investigated. These are two vaccinated duck farms located in Nouvelle-Aquitaine region (Landes and Dordogne administrative units). All 15 exposed persons identified by Public Health France/*Santé publique France*, all of whom remained asymptomatic, accepted the screening and no human infection was detected.

Work was carried out in parallel this winter with all stakeholders to develop a stabilised, more operational version of the SAGA protocol, which will be implemented during the 2025-26 season throughout metropolitan France.

³ [Targeted surveillance to identify human infections with avian influenza virus during the 2023/24 influenza season, EU/EEA \(europa.eu\)](https://ec.europa.eu/eurostat/statistics-explained/index.php/Targeted_surveillance_to_identify_human_infections_with_avian_influenza_virus_during_the_2023/24_influenza_season)

Q17. Are passive and active monitoring protocols effectively implemented? Is there an official audit? By whom? How often?

There is both passive and active monitoring, but no formal systematic verification.

Since the update of the zoonotic influenza surveillance protocol by Public Health France/*Santé publique France* in February 2025, fewer than a dozen reports of patients suspected of zoonotic influenza (i.e. with a compatible clinic, evocative virological sampling (positive but non-subtypeable influenza A) with or without identified risk exposure) have been reported to the health authorities (ARS, Public Health France/*Santé publique France* and DGS), in several regions (Occitanie, Pays de la Loire, Centre Val de Loire, Hauts de France). A zoonotic influenza virus search was systematically carried out by the CNR VIR, with a negative result for each patient tested. None of these patients had reported exposure to a confirmed HPAI outbreak.

To date, only one case of zoonotic influenza has been detected in France, due to a porcine influenza virus of subtype H1N2 in early September 2021, in a pig farmer who developed a severe respiratory form in August 2021.

The CNR VIR performs a systematic subtyping of all influenza A samples sent to it, either as part of seasonal influenza surveillance or as part of patients with severe low acute respiratory infection (resuscitation admission) for whom the clinician requests that the sample be sent to the CNR for characterisation. Sequencing is carried out systematically for serious cases or suspicions of zoonotic influenza, if the viral load of the sample allows it.

Q18. Please provide information on national case reporting protocols at EU level, in accordance with the International Health Regulations, in the Early Warning and Response System (EWRS) and the European Infectious Disease Surveillance Portal (Epipulse).

It is expected that any confirmed case of zoonotic influenza will be reported to ECDC and WHO by EWRS and Epipulse, within 24 hours of confirmation of the case, in accordance with the International Health Regulations.

Q19. Please provide information on the sharing of data with the WHO Global Influenza Surveillance and Response System (GISRS) Collaborating Influenza Reference and Research Centres.

The CNR VIR works closely with GISRS and the laboratory based at the Institut Pasteur (associated laboratory of the CNR) is the H5 collaborating centre for the WHO. All viral sequences produced by NRC are deposited in GISAID (Global Avian Influenza Data Sharing Initiative).

Q20. Is information on data on genetic sequences of viruses from humans, animals or their environment readily and freely accessible in common databases, even before publication in peer-reviewed journals?

All human viral sequences produced by CNR are deposited in GISAID.

Q21. Is there a risk assessment to adjust prevention, surveillance and response measures against zoonotic avian influenza in humans?

Public Health France, ANSES and CNR VIR regularly carry out a joint analysis of available epidemiological, clinical and virological data on the national and international situation of HPAI, as well as risk analyses produced by ECDC, WHO, FAO, WHOA and the US CDC (Centre for Disease Prevention and Control - United States of America).

This collective expertise leads to the drafting of joint summary notes for the Ministries of Health and Agriculture, providing qualitative risk analysis and recommendations for action in terms of prevention, surveillance and preparedness for an influenza pandemic.

Q21.1. Who is responsible for the risk assessment?

Public Health France coordinates the work involving experts from ANSES and CNR VIR.

Q21.2. How often is the risk assessment conducted/revised?

There is no predefined regularity; if it deems it relevant, the expert group shall make itself known to the Ministries of Health and Agriculture, otherwise it shall conduct a risk assessment directly in response to referrals from the Directorate-General for Health. A total of 8 joint risk analysis notes were drafted between 2021 and 2024:

- 1 on H5N8 human cases in Russia (2021)
- 1 on the first H10N3 human cases in China (2021)
- 1 on the first H3N8 human cases in China (2022)
- 5 on IAHP / H5N1 of clade 2.3.4.4b (2 in 2022, 1 in 2023, 2 in 2024)

Q21.3. Are risk assessments available for consultation?

These risk analyses (ADR) have not been made public to date. However, information is available on the ANSES website:

- www.anses.fr/fr/content/influenza-aviaire-les-risques-sanitaires-actuels-pour-les-animaux-et-les-humains

Q21.4. When was the last risk assessment?

As of 1 October 2025, the latest risk analysis dates from December 2024.

Q22. Please provide information on laboratories involved in the surveillance of avian influenza in humans

Q22.1. Details on the designation and accreditation of laboratories

The four laboratories of the CNR VIR cover the entire French territory (including the DROMs), with a coordinating laboratory and three associated laboratories (detailed list below).

The laboratories are accredited standard NF EN ISO 15189 – 2012 (Order of 13 January 2010 and the Law of 31 May 2013) for microbiology disciplines (including virology).

The associated laboratory of the Institut Pasteur in Paris is the H5 reference laboratory for the WHO.

Hospices Civiles de Lyon (HCL) (coordinating laboratory)

Laboratory of Virology of the CHU de Lyon /CNR of Respiratory Infections Viruses Institute of Infectious Agents

Hôpital de la Croix Rousse – GHN

103, rue de la Croix Rousse 69317 Lyon CEDEX 04

Regions concerned: Auvergne-Rhône-Alpes, Corsica, Nouvelle-Aquitaine, Occitanie, Provence-Alpes-Côte d'Azur.

Institut Pasteur (associate laboratory)

Molecular Mechanisms of Pneumovirus Multiplication Unit

Department of Virology

28 rue du Dr Roux 75724 PARIS CEDEX 15

Regions concerned: Burgundy-Franche-Comté, Brittany, Centre-Val-de-Loire, Grand-Est, Hauts-de-France, Ile-de-France, Normandy, Pays-de-la-Loire.

Institut Pasteur de la Guyane (associated laboratory)

Virology Laboratory

23 Pasteur Avenue BP 6010 97 306 Cayenne Cedex

Regions concerned: West Indies, Guyana.

CHU Meeting (associated laboratory)

Virology Laboratory

Allée des Topazes, CS 11021 97400 Saint-Denis

Regions concerned: Reunion, Mayotte.

Q22.2. Are they under official control? If so, what controls?

The CNRs (including the CNR VIR) are under the supervision of Public Health France/*Santé publique France*, which finances them, defines their specifications and coordinates a committee of external experts who evaluate their activities.

Q22.3. Do they have appropriate techniques to detect and identify strains? Do they have Whole Genome Sequencing (WGS) capability? Do they carry out inter-laboratory tests?

The answer is "Yes" to these 3 questions. The latest activity report of the CNR VIR is not public.

NRC VIR laboratories have molecular tests to detect all influenza A viruses and subtyping tests for seasonal influenza A(H1N1), A(H3N2) viruses; A(H5Nx), A(H7N9) and A(H9N2). In

addition, in the event of a non-subtypable virus, the laboratory can perform an emergency sequencing (in less than 36 hours). CNR VIR laboratories all have full genome sequencing capabilities for influenza A viruses. CNR VIR laboratories participate annually in external quality assessment (WHO, ECDC). Inter-laboratory tests are carried out between the two CNR Laboratories in France.

Here is the list of AQEs on influenza, including zoonotic influenza, in which the CNR VIR has participated or organised in recent years:

- EQA EISN (QCMD) (June 2024): Influenza A including zoonotic (pre-testing of this AQE in February 2024);
- EQA WHO (July 2023) influenza including zoonotic + SARS-CoV-2;
- EQA EISN seasonal influenza (not zoonotic) (May 2023);
- WHO EQA (July 2022) Influenza including zoonotic + SARS-CoV-2;
- Organisation of a bioinformatics AQE on zoonotic influenza A viruses by the Institut Pasteur in 2024.

Q22.4. Do they provide appropriate lead times? Specify deadlines and average.

The laboratories of the CNR VIR are able to render a result of typing and subtyping flu (seasonal or zoonotic) in the day if the sample is received before 16 hours in working days. Viral genome analysis by whole genome sequencing can be performed within one week, and in an emergency context (positive sampling for type A virus and negative sampling for seasonal subtypes), sequencing can be performed more quickly (24-36 hours)

In the event of an emergency (strong suspicion, clustered cases of probable zoonotic influenza, degraded epidemiological situation), samples may be treated at night or at weekends by the Emergency Biological Intervention Cell (CIBU) at the Institut Pasteur or the virological standby duty of the Hospices Civils de Lyon.

Q22.5. Is there a plan to ensure sufficient laboratory capacity in the event of large-scale epidemics?

The pandemic preparedness plan was updated in 2024. A decision support document on the Government's pandemic response plan was made public by the Secretariat-General for Defence and National Security in December 2024 and is available on its website:

- https://www.sgdsn.gouv.fr/files/files/Circulaires%20et%20instructions/SGDSN-PLAN_GOUVERNEMENTAL_PANDEMIE_V8-NUM%20%281%29.pdf

Work is underway to further deploy influenza typing and subtyping capabilities for first-line diagnosis, to strengthen national and local capacities to detect sporadic cases of indigenous and imported zoonotic influenza, as well as for pandemic preparedness.

In the same vein, work is also being carried out by the DGS, the CNR and the COREB mission to deploy the H5 PCR in the Reference Health Establishments (ESR). The CNR VIR has published an RT-PCR protocol for the detection of A(H5N1) viruses on its website:

- https://www.pasteur.fr/sites/default/files/rubrique_pro_sante_publique/les_cnr/virus_des_infections_respiratoires_dont_grippe/pcr_h5_20250317.pdf

The CNR VIR provides laboratories of Reference Health Establishments who request a positive test for the development of the test (synthetic RNA).

Q22.6. Do they communicate with veterinary surveillance laboratories on avian influenza?

The CNR VIR (public health component) and the LNR IA (animal health component) working actively together: regular exchanges, sharing of reagents and strains, pooling of sequences generated on both sides in case of detection of zoonotic influenza cases for analysis. CNR VIR and LNR IA participate in joint HPAI risk analyses coordinated by Public Health France/*Santé publique France* and in the development of surveillance protocols for avian influenza.

One of the objectives of the EMERGEN 2.0 consortium led by ANRS? CEF, Public Health France and ANSES is to include zoonotic influenza viruses in the project, with the establishment of a common database between CNR and LNR for the analysis of the sequences of viruses of avian influenza and of pig influenza from animal and human origin.

Q23. Who is responsible for ensuring the implementation of response measures when human cases are detected?

The officials are the Regional Health Agencies (ARS), the Directorate General of Health (Ministry in charge of Health) and Public Health France/*Santé publique France* (public institution) for epidemiological investigations.

For more information on the Regional Health Agencies (ARS):

- <https://www.ars.sante.fr/quest-ce-quune-agence-regionale-de-sante>

Q24. Are there human health intervention protocols for outbreaks of avian influenza in poultry?

Yes, this is the SAGA protocol (see answer to Q16).

Q25. Are there human health intervention protocols for the detection of outbreaks of avian influenza in wild animals and farmed mammals?

Yes, this is the SAGA protocol applied for farmed mammals or any other mammal species infected with an HPAI virus.

Q26. What measures would be taken if a human symptomatic case were detected?

The action to be taken in the event of zoonotic influenza consists of a series of actions, namely:

- isolation of the humans concerned;
- epidemiological, virological and clinical investigation;
- antiviral prescription and medical care of type REB (Epidemic and Biological Risk);
- search for co-exposures for isolation, screening, 10-day pendant follow-up, with antiviral if necessary.

Q27. What action would be taken if a human asymptomatic case were detected?

The action to be taken is the same as the action to be taken in the event of zoonotic influenza (see answer to question Q26).

Q28. Who conducts epidemiological investigations in humans and when (on symptomatic and asymptomatic cases)? Are epidemiological investigations carried out in humans where there is a high risk of infection? (i.e. in people who may have been exposed to positive animals).

The officials are the Regional Health Agencies (ARS), the Directorate General of Health (Ministry in charge of Health) and Public Health France (public institution) for epidemiological investigations according to the action to be taken in case of zoonotic influenza and according to the SAGA protocol.

Q29. Is the risk assessment updated with all recent available data (surveillance and epidemiological investigations in animals and humans) as part of a "One Health" approach? If so, explain how.

Yes, the risk assessment has recently been updated with experts in animal, environmental and human health. To this end, there are regular exchanges between Public Health France, the CNR, ANSES, DGAL, DGS and OFB, to share knowledge on the assessment of the risk to human health in relation to HPAI and to develop prevention, surveillance and control strategies.

Q30. What are the enhanced risk communication and risk mitigation policies for health professionals and those exposed in the course of their work, risk managers responsible for human health, the environment, animal health and occupational health?

In the area of animal health and the health of livestock workers, preventive information is disseminated by the Ministry of Agriculture and Agricultural Social Insurance (*Mutualité sociale agricole/MSA*).

The MSA is a professional agricultural organisation with a private status and a public service manager, under the supervision of, *inter alia*, the ministries responsible for agriculture and health). Its role in the network of 'One Health/One Health' players in the HPAI epizootic context includes: health and safety at work (including the prevention of occupational risks), information and psychosocial support for agricultural professionals and health promotion (such as the promotion of human influenza vaccination for public health purposes).

- Ministry of Agriculture:
<https://agriculture.gouv.fr/influenza-aviaire-prevention-du-risque-de-contamination-de-lanimal-lhomme>
- Agricultural social mutuality:
<https://www.msa.fr/lfp/sst/vaccination-grippe-saisonniere-professionnels-filières-aviaire-porcine>

- The MSA distributed a flyer to its relevant affiliates encouraging them to vaccinate against seasonal influenza:
<https://www.msa.fr/lfp/documents/11566/82313394/Flyer+-+Prot%C3%A9gez+votre+sant%C3%A9+et+celle+de+vos+animaux>

For public health professionals, the DGS has issued "DGS Urgent" messages. Examples of emergency messages:

- DGS-URGENT message of 24/02/2025:
https://sante.gouv.fr/IMG/pdf/dgs-urgent_no2025-04_reply_iaph.pdf
- DGS-URGENT message of 29/12/2022:
https://sante.gouv.fr/IMG/pdf/dgs-urgent_n2022_87_-_grippe_zoonotique.pdf
- DGS-URGENT message of 09/09/2021:
https://sante.gouv.fr/IMG/pdf/dgs-urgent_97_detection_cas_humain_virus_influenza_porcin_h1n2v.pdf

Instructions are sent as necessary to health establishments (MARS messages, health early warning message) and ARS (MINSANTE messages), citing in particular the HCSP opinion recommending hygiene precautions in a care setting.

Institutional meetings allow for an exchange of up-to-date information:

- Technical Committee on Public Health (TCPH). Periodic meeting between the Ministry of Health and the Directors of Public Health of the RHAs.
- Club VSS. Periodic meeting between the DGS and those responsible for monitoring and responding to health alerts from ARS.

In the event of the detection of one or more cases of avian influenza on national territory, a multidisciplinary unit bringing together Public Health France, the CNR VIR, ANSES and the DGAL is set up by the DGS to define the prevention and control measures to be put in place automatically for the case or cases and the means of communication adapted to the general public, to professionals in the sector concerned and only to health professionals.

Q31. Are the intervention measures regularly evaluated and adapted in the light of new risks, relevant data and new epidemiological situations? By whom? How often?

Public Health France/*Santé publique France* has regularly updated its guidelines to take into account the recommendations of the ECDC and the WHO, as well as the international and national epidemiological situation.

Link to these recommendations Health publishe France:

- <https://www.santepubliquefrance.fr/media/files/01-diseases-and-trauma/human-animal-a-l-transmissible-diseases/influenza-aviar/conduct-a-tenir-vis-a-vis-des-persons-exposed-to-virus-grippe-d-origine-animale>

The HCSP was seized by the DGS in 2017, 2021 and 2025 to update its recommendations on zoonotic influenza. The last DGS/DGAL referral to the HCSP was the subject of an opinion issued by the HCSP in May 2025, see reply to question Q10.

Q32. Can you provide examples of public health measures taken, if any, following the identification of avian influenza in animals?

Public Health France and the DGS are informed by the DGAL in the event of an outbreak of HPAI, and in turn liaise with the relevant regional health agency (ARS). Exchanges may occur between the ARS, the regional unit of Public Health France and the veterinary services (DDecPP).

The DDecPP systematically distributes the zoonotic influenza leaflet from Public Health France/*Santé publique France* to people exposed to an HPAI outbreak (a minimum to the farmer).

The SAGA protocol shall be implemented for asymptomatic persons exposed to an outbreak of HPAI.

3. Animal health

Q33. Please provide any documented policy on the implementation of adequate biosecurity measures in poultry establishments and establishments keeping birds in captivity

National rules:

- Order of 14 March 2018 on measures to prevent the spread of animal diseases by road transport of live birds.
<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000036715586/>
- Order of 29 September 2021 on biosecurity measures applicable by operators and animal-related professionals in establishments keeping poultry or captive birds for the prevention of animal diseases transmissible to animals or humans (replaces Order of 08 February 2016).
<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000044126719>
- Order of 25 September 2023 on surveillance, prevention, control and vaccination measures against highly pathogenic avian influenza (HPAI).
<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000048110961>

Technical instructions in force:

- Instruction technique DGAL/SDSPA/2018-549: Detailed rules for the application of biosecurity measures in poultry holdings and checks on their correct application.
<https://info.agriculture.gouv.fr/boagri/instruction-2018-549>
- Instruction technique DGAL/SDSBEA/2021-786: Biosecurity – Conditions for applying the measures provided for in the Order of 29 September 2021 to feathered game farms.
<https://info.agriculture.gouv.fr/boagri/instruction-2021-786>
- Instruction technique DGAL/SDSBEA/2023-242: Biosecurity – Conditions for sheltering commercial poultry (last version November 2024)
<https://info.agriculture.gouv.fr/boagri/instruction-2023-242>
- Instruction technique DGAL/SDSBEA/2023-475: Compulsory health inspections in the poultry sector: Launch of the 2023-2024 campaign
<https://info.agriculture.gouv.fr/boagri/instruction-2023-475>
- Instruction technique DGAL/SDSBEA/2024-74: Animal health inspection in the poultry sector – Biosecurity/Health Charter/Trade approval/COHS palmipedes – Campaign 2024-2027 – Official screenings for Salmonella control plans
<https://info.agriculture.gouv.fr/boagri/instruction-2024-74>

Q34. What are the communication actions to poultry keepers regarding biosecurity?

The Ministry of Agriculture (DGAL) carries out communication activities. For example, in March 2025, he drafted and distributed a brochure entitled 'Farmer of poultry: regulatory health requirements to protect your livestock from health hazards. This brochure is available on the website of the Ministry of Agriculture:

- <https://agriculture.gouv.fr/tout-ce-quil-faut-savoir-sur-linfluenza-aviaire>

In addition, DGAL regularly sends "IAHP Flash Info" emails to professional stakeholders (representatives of breeders and veterinarians). These emails recall the importance of biosecurity, in addition to surveillance and vaccination. This message is also included in the Ministry's press releases on HPAI.

Q35. Where can I find information on the national vaccination strategy for poultry against highly pathogenic avian influenza?

The national vaccination plan against highly pathogenic avian influenza (HPAI) is published on the website of the Ministry of Agriculture:

- <https://agriculture.gouv.fr/tout-ce-qu'il-faut-savoir-sur-le-plan-daction-vaccination-iahp-en-france>

Q36. Please provide the definition of a suspect and a confirmed case of highly pathogenic avian influenza

A suspected case of highly pathogenic avian influenza (HPAI) shall be established on epidemiological, clinical, lesional or non-negative analytical evidence in laboratory tests.

Confirmation of a case of HPAI requires detection of infection with an H5 or H7 virus with identification of pathogenicity by direct HPAI diagnosis by the National Reference Laboratory (NRL) or by an approved laboratory.

Q37. Please provide information on the awareness-raising campaigns and recent trainings for stakeholders and veterinarians, which have been launched in order to increase the number of reports of suspected cases of highly pathogenic avian influenza.

On 6 February 2025, during a press briefing on HPAI, co-organised with the Ministry of Health, various messages on reporting in case of detection were passed on to the media present, including several titles from the veterinary press. Read here the press release issued at the end of the conference: See answer to Q11.

The Ministry of Agriculture's press releases on HPAI regularly remind everyone of the importance of ensuring proper monitoring of the health status of its birds. For example, the press release of 18 December 2024 recalls that: "Monitoring, biosecurity and vaccination are complementary pillars of HPAI prevention."

This message is used as a slogan, systematically reproduced in exactly the same terms, here in the press release of 30 December 2025, that of 13 December 2024, that of 15 October 2024, that of 2 October 2024, that of 30 August 2024, etc.

For these press releases, see the website of the Ministry of Agriculture/Espace Presse.

In conclusion, the IAHP information emails sent by DGAL to poultry and veterinary professional organisations often include the following key message: '*Regardless of the level of epizootic risk for HPAI, the health tripod shall remain: biosecurity, surveillance and vaccination. Biosecurity: all concerned!*'.

The Ministry of Agriculture's website includes a page for small bird keepers that includes two key awareness messages on reporting suspected HPAI cases in an online downloadable document entitled: '*Control of avian influenza: Did you protect your birds well?*'

- <https://agriculture.gouv.fr/influenza-aviaire-mesures-mettre-en-place-par-les-petits-detenteurs-doiseaux>

These two key messages are:

- Monitor your birds daily and contact your veterinarian in case of nervous or respiratory signs or changes in behavior.
- In case of abnormal mortality of your birds, keep the cadavers, isolate them, protect them and contact your veterinarian or your departmental directorate of population protection.

The "Animal diseases" page of the website of the Ministry of Agriculture highlights a reference document for French veterinarians since 2010, the Practical Guide for the diagnosis and management of epizootic diseases. In the section dedicated to HPAI, this document recalls in detail the symptoms to detect the disease and good practices in case of clinical suspicion.

- https://agriculture.gouv.fr/sites/default/files/manuel2010_final.pdf

Q38. Please explain or provide documented surveillance program for highly pathogenic avian influenza in kept mammals (domestic)

Infection of suidae kept with an influenza virus is monitored by a porcine influenza surveillance network (Resavip). This network is based on volunteerism. Sequencing of strains can detect an H5 or H7 strain of avian origin. This approach may change if the level of risk is increased, if ruminants are infected, or if strain B3.13, which frequently infects cattle in the United States, is identified in Europe and more specifically in France.

For the surveillance of mammals in the event of an outbreak of influenza in poultry, in a mixed-farm outbreak where birds and pigs are kept, pigs must be collected. Clinical signs of infection are also sought in other mammals present in this outbreak (e.g. dogs, cats). One case in a cat was detected in the vicinity of an outbreak in the Deux-Sèvres department.

The criteria for suspicion are clinical (evocative signs) or lesional, the samples taken are analyzed (PCR on swabs or organs) by the approved laboratories and the NRL ANSES Avian Influenza in Ploufragan.

Q39. Please explain or provide the documented surveillance program for highly pathogenic avian influenza in wild mammals (free fauna)

HPAI surveillance on non-captive wild mammals is event-based. It is carried out in accordance with technical instruction DGAL/SDSBEA/2024-462 (<https://info.agriculture.gouv.fr/boagri/instruction-2024-462>), which was drafted following the recommendations of the follow-up group 'IAHP – wildlife' of the animal health epidemiological surveillance platform, sent to DGAL in July 2023, and after consultation with stakeholders.

To be distinguished:

- surveillance on terrestrial wild mammals, carried out by the SAGIR network (wildlife mortality monitoring network, run at national level by the French Office for

Biodiversity and the National Federation of Hunters, and 80% funded by the DGAL for 5 regulated diseases including HPAI), which detected positive cases in 3 foxes in 2023. In November 2025, 4 foxes and 1 otter were confirmed as HPAI.

- monitoring of marine wild mammals, coordinated by the Pelagis Observatory (University of La Rochelle – CNRS):
 - <https://www.observatory-pelagis.cnrs.fr/>.

The criteria for suspicion are clinical (evocative signs) or lesional, the samples taken are analyzed (PCR on swabs or organs) by the approved laboratories and the NRL ANSES Avian Influenza in Ploufragan.

Q40. Please include, if not already included in the emergency plan provided, the chain of command in the event of an outbreak of highly pathogenic avian influenza.

France applies a common chain of command to any crisis, that of the ORSEC (Organization of Civil Security Response) system under the authority of the Minister of the Interior. The ORSEC mechanism applies and adapts as soon as the means of response to the crisis are exceeded at local level or insufficient within the ministerial remit. The command under the guidance of the Minister of the Interior or his representative at departmental or regional level (prefect of department or prefect of region) may ask the other services of the State to contribute to the management and control of the event.

With reference to Article 43 of Regulation (EU) 2016-429 ('Animal Health Law'), the chain of command applied (together with other public authorities and stakeholders) is specified in the Animal Health Emergency Response Plan (AHEP) – General Principles (pages 14 and 15), published by Technical Instruction DGAL/MUS/2017-585 of 29 November 2017.

- <https://info.agriculture.gouv.fr/boagri/instruction-2017-585>

Article L.201.5 of the Rural and Maritime Fisheries Code on the State's responsibilities for surveillance, prevention and combating health hazards states, with reference to Article 43 of Regulation (EU) 2016-429, that in each department the measures are implemented under the ORSEC plan provided for in Articles L.741-1 to L.741-5 of the Internal Security Code.

The organisation and structuring of emergency centres (crisis centres) at departmental, regional and national level are specified in addition to the PNISU – general principle in two procedures distributed:

1. **A national procedure** (for DDecPP, DRAAF and DGAL) for managing health crises
The 'health crisis management' procedure applies to all national, regional and departmental levels on metropolitan and ultramarine territory and specifies the organisation of regional and local crisis centres, depending on the administrative and geographical configuration, and the management established.

2. **A local procedure** (for DGAL) for managing animal health crises:

In addition to this general procedure, the procedure 'General framework for DGAL's crisis organisation' presents the pre-established organisational patterns, according to a scale of graduation by type of event, meeting the needs for responsiveness and adaptability for all crises that may impact a relevant sector of DGAL's activity.

4. Intersectoral cooperation "One Health"

Q41. Is there cross-sectoral cooperation to implement a One Health approach to avian influenza?

Yes, there is cross-sectoral cooperation to implement a "One Health" approach to avian influenza.

- ✓ **If yes:**
 - **What institutions are involved and their roles?**

Anticipating, preparing for and managing the risks arising from avian influenza is a multi-stakeholder, cross-sectoral approach:

- The Platform for Epidemiological Surveillance in Animal Health (PESA) continuously monitors and publishes a weekly situational bulletin informing about the level of risk. PESA pools the competences of more than 60 public or private bodies responsible for animal or human health:
 - <https://plateforme-esa.fr/fr>
- Public Health France is responsible for risk analysis, in conjunction with ANSES and the national reference centres, and for human surveillance. Public Health France/Santé publique France (SpF) oversees the CNR VIR (CNR)
 - <https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-transmissibles-de-l-animal-a-l-homme/grippe-aviaire>
- ANSES participates in the risk analysis. It supervises the national reference laboratories (NRLs) for avian and porcine influenza respectively:
 - <https://www.anses.fr/fr/content/dossier/influenza-aviaire>
- LNR and CNR implement virological monitoring and share sequencing data. The NRCs ensure the deployment of diagnostic resources to medical biology laboratories.
- The Directorate-General for Health (DGS) informs health professionals of the level of risk and sends them the recommendations (<https://sante.gouv.fr/professionals/article/dgs-urgent>); it refers the matter to the expert bodies (High Council of Public Health/HCSP, High Authority of Health/HAS, among others) and defines the targets of strategic stocks (whose management on behalf of the State is the responsibility of Public Health France); it coordinates the anticipation, preparedness and response to the human health risk in the territory.
DGS website:
 - <https://sante.gouv.fr/ministere/organisation/organisation-des-directions-et-services/article/organisation-de-la-direction-generale-de-la-sante-dgs>
- The Directorate-General for Food (DGAL) informs agricultural professionals of the level of risk and sends them the recommendations; it receives reports of avian outbreaks and alerts the health chain (DGS, ARS); it coordinates the actions of the departmental directorates in charge of the protection of populations (DDecPP).
DGAL website:
 - <https://agriculture.gouv.fr/sante-protection-des-animaux>

- DDecPPs receive reports from outbreaks and inform DGAL accordingly. The DDecPP informs the exposed persons and communicates this information to the regional cells (CR) of Public Health France/*Santé publique France* for investigation.
- The regional cells (RCs) of Public Health France/*Santé publique France* are responsible for the epidemiological investigation of any confirmed case of zoonotic influenza, whether detected by passive surveillance (reporting by a clinician of a patient with virological confirmation of infection with a zoonotic influenza virus by the CNR VIR) or by active surveillance (SAGA protocol, which concerns asymptomatic persons who have been exposed to an outbreak of HPAI and who have been screened following that exposure).
- The Regional Health Agencies (ARS) are responsible for organising the screening of persons exposed to outbreaks of HPAI virus identified by DGAL and the management measures to be implemented in the event of the detection of a confirmed case of avian influenza and participating in the epidemiological investigation. In addition, any reports of suspected or confirmed human cases of AI shall be sent to them. The ARS then put in place risk mitigation measures (contact tracing, isolation of cases, etc.).
- The French Biodiversity Office (OFB) and the hunters' federations are co-pilots of the health surveillance of wildlife (SAGIR network).

Q42. Which is the main organisation responsible for carrying out the activities?

Outside crisis situations, there is no leader, but a mutual information mechanism and a division of activities, while respecting the area of competence of each. Each organisation shall have a monitoring and alert unit and take-over procedures.

As a matter of routine, the coordination committee for the management of zoonoses brings together on a monthly basis DGS (Direction générale de la santé/Ministère de la santé), DGAL (Direction générale de l'alimentation/Ministère de l'agriculture), DEB (Direction de l'eau et le biodiversité/Ministère de l'environnement), ANSES and Public Health France/*Santé publique France*. It monitors the progress of preparedness work for alert situations.

A Health Security Meeting (RSS) led weekly by the Director-General for Health structures the monitoring and risk analysis activities of all French health security stakeholders (national agencies, operators, other ministries, etc.).

SSR is used to ensure the sharing of information between all actors involved in the management of health alerts, to arbitrate the measures to be taken and to ensure the full traceability of decisions taken on relevant health alerts at national level and to inform political authorities of health security alerts of national scope. Its weekly frequency allows to react early enough, especially on emerging phenomena.

This approach is reproduced at regional level by the ARS (Article R.1413-61 of the Public Health Code, - Regional RSS regulatory framework - 2023), any significant situation will be reported immediately to the CORRUSS, which ensures its collection and analysis at national level on a daily basis as described in the 2015 instruction on the methods of

transmission and management of alerts and exceptional health situations between the ARS and the Ministry in charge of health.

In the event of a crisis affecting both the animal and human health sectors, an inter-ministerial crisis cell (ICC) can be activated.

For more information on the inter-ministerial organisation of the health crisis, see:

- Link to: Circular 6418/SG of 26 September 2023 on the governmental organisation for the management of major crises:
 - <https://www.sgdsn.gouv.fr/files/files/Circular%20PM.pdf>;
- Link to: Circular 6495/SG of 1 July 2019 on the governmental organisation for the management of major crises:
 - <https://www.sgdsn.gouv.fr/files/files/Circular%20n%C2%B0%206095-SG%20of%201er%20July%202019%20relative%20%C3%A0%20organisatio%20government%20for%20la%20management%20of%20crises%20major.pdf>

Q43. Is there a financial mechanism to support activities to implement the *One Health* approach?

No, there is no dedicated financial mechanism for the one-health approach.

- ✓ **If not:**
 - **Is there a plan to improve the implementation of the *One Health* approach?**

In 2023, an inter-ministerial *One Health* Task Force (TFIOH) was created. It is a flexible inter-ministerial organisation, whose objective is to cross-eye on cross-sectoral themes in order to strengthen the coordination of the actions undertaken and to plan for the medium term in order to define what makes it possible to anchor the '*One Health*' approach in public policies.

This inter-ministerial *One Health* Task Force brings together four ministries: Health, Agriculture, Environment and Research.

Its operation is mainly at the level of the administrations, and in particular at the level of the services (sub-directors, offices and staff on mission), with regular meetings (approximately 1 meeting/quarter). The directorates also monitor and validate the work programme. Ministerial cabinets were asked to follow the proceedings and participate in certain meetings.

At this stage, the inter-ministerial *One Health* Task Force only includes central administrations, in order to maintain a tighter and therefore more operational format. However, a link is established with other interested entities, in particular operators (and in particular health agencies) who also mobilise this *One Health* approach (Anses, Public Health France/Santé publique France, etc.), as well as the *One Health* Institute.

For more information on the *inter-ministerial One Health* Task Force:

- https://sante.gouv.fr/IMG/pdf/cns_20240613_presentation_dgs_se_uss_ea.pdf

The Coordinating Committee for the Management of Zoonoses (see reply to question Q42) provides in its terms of reference for reciprocal exchanges with the Interministerial Task Force One-Health (TFIOH).

The 4th National Health and Environment Plan (PNSE4), co-led by the Ministries responsible for health and the environment, was launched in May 2021 after consultation with all stakeholders in the context of the Health and Environment Group (GSE).

In a context marked by public expectations on health and environment issues, the PNSE4 proposes concrete actions to better understand and reduce risks, including the risks of infectious agents in relation to zoonoses. From this point of view, it is fully in line with the '*One Health*' approach.

A *One Health Follow-up Group* with more than 90 members, whose secretariat is provided by DGAL, is responsible for the follow-up of some of the actions, including Action 20 "Monitoring the health of terrestrial fauna and preventing zoonoses" led by DGAL/Bureau of Animal Health. Terrestrial fauna here corresponds to wild and domestic fauna.

Action 20 is currently being implemented at national level, broken down into four priorities:

- 1/ improve and prioritise knowledge of wildlife health in France and facilitate access to health information;
- 2/ define guidelines for the monitoring, prevention and control of zoonoses from wild animals;
- 3/ establish synergies and inter-ministerial collaborations between the various monitoring networks in human, animal (including food) and environmental health;
- 4/ put in place a health strategy for parks and hunting pens and for protected areas, in particular national parks.

For more information on PNSE4 and in particular its action 20 on the surveillance and prevention of zoonoses:

- <https://sante.gouv.fr/IMG/pdf/pnse4.pdf>

In addition, the second PNSE4 progress report (published in February 2025) sets out the precise state of play of its actions, including Action 20. The progress report also highlights the launch of the *One Health* Institute as one of the flagship actions (p. 7), and illustrates the activities of the monitoring groups including the *One Health Follow-up Group* (p.18), as well as the place of the *One Health* approach in the regional variations of the PNSE4 (p. 22) called Regional Health and Environment Plans.

Links to the second PNSE4 progress report and its annexes:

- https://www.ecologie.gouv.fr/sites/default/files/documents/2nd_rapport_pnse4_fev2025.pdf
- https://www.ecologie.gouv.fr/sites/default/files/documents/descriptif_de_l_etat_d_avancement_des_actions_et_sous-actions_du_pnse4-mars2025.pdf

The PRSE (Regional Health and Environment Plans) decline the PNSE4 in regions and mobilize decentralized services in connection with territorial actors. The inter-ministerial instruction DGS/DGPR of 13 April 2022 on the definition and implementation of regional health and environment plans (RHEPs) provides for action 20 to be included in each RHEP.

For more information on PRSEs:

- <https://www.ecologie.gouv.fr/politiques-publiques/plans-régionaux-santé-environnement-prse>

Finally, the National Biodiversity Strategy 2030 (NBS 2030) includes a measure 29 that mentions: “*Public policies shall integrate the ‘One Health’ approach, which takes into account the interrelationships between public health, animal health, plant health and the environment*”.

For more information on the SNB 2030:

- <https://www.ecologie.gouv.fr/politiques-publiques/strategie-nationale-biodiversité-2030>

Q44. Do you have an interdisciplinary emergency plan for avian influenza using the *One Health* approach? If so, have simulation exercises been organised?

There is no contingency plan for avian influenza, as there is a general contingency plan for the most harmful diseases, including HPAI: the EPSU or Emergency Health Response Plan. In addition, the Government has developed a Pandemic Response Plan, and the General Directorate of Health (DGS) is currently developing a version of this plan in its public health aspects.

Link to the Government’s Pandemic Response Plan:

- https://www.sgdsn.gouv.fr/files/files/Circulaires%20et%20instructions/SGDSN-PLAN_GOUVERNEMENTAL_PANDEMIE_V8-NUM%20%281%29.pdf

In addition, an action plan has also been drawn up by the DGS, in conjunction with all stakeholders, to define the actions to be taken with regard to:

- monitoring and follow-up of the situation;
- the conduct to be taken around the cases;
- vaccination, treatments and diagnostic means;
- research and development;
- Communication.

5. Glossary

ADILVA	French Association of Directors and Executives of Public Veterinary Analytical Laboratories
ADIS (notification)	System for notifying outbreaks of HPAI to the European Commission
ADR	Risk analysis
AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
AFVPZ	Francophone Association of Zoological Park Veterinarians
ANSES	National Health Security Agency
ARS	Regional Health Agency
CGDD	Office of the Commissioner-General for Sustainable Development (Ministry of the Environment)
CIBU	Biological emergency response unit (CIBU) at the Institut Pasteur
CIC	Inter-ministerial Crisis Cell
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CNR (VIR)	National Reference Centre for Respiratory Viruses
CNRS	National Centre for Scientific Research
COREB	Operational Coordination of Epidemic and Biological Risk
CORRUSS	Operational Centre for Regulation and Response to Health and Social Emergencies
CR (of Public Health France)	Regional Unit of Public Health France/ <i>Santé publique France</i>
CRBPO	Centre for Research on Bird Population Biology
DD(ETS)PP/DDPP/ DDecPP	Departmental Directorate (Employment, Labour, Solidarity) in charge of the protection of populations
DEB	Directorate for Water and Biodiversity (Ministry for the Environment)
DGAL	Directorate-General for Food (Ministry of Agriculture)
DGPR	Directorate-General for Risk Prevention (Ministry of the Environment)
DGS	Directorate-General for Health (Ministry of Health)
D(R)AAF	(Regional) Directorate for Agriculture and Forestry
DREAL	Regional Directorate for Environment, Planning and Housing
DROM	Overseas departments and regions
ECDC	European Centre for Disease Prevention and Control
EFSA	European Food Safety Authority
PPE	Personal protective equipment
EQA	External quality assessment
EWRS	Request from the European Commission: Early warning and response system
FAO	Food and Agriculture Organization of the United Nations
FDC	Departmental Federation of Hunters
FFP (mask)	Level 2 Filter Respiratory Mask
FNC	National Hunters Federation
FRC	Regional Hunters Federation
GISAID	Global Avian Influenza Data Sharing Initiative
GISRS (WHO)	WHO Global Influenza Surveillance and Response System (GISRS)
HAS	High Health Authority

HCSP	High Council of Public Health
AI	Avian influenza
IAFP	Low pathogenic avian influenza
IAHP	Highly pathogenic avian influenza
ICM	Cross-sectoral cooperation (<i>management of cross-sectoral cooperation</i>)
NRL (Anses)	ANSES National Reference Laboratory
MSA	Agricultural social mutuality / <i>Mutualité sociale agricole</i>
NSB3 (laboratory)	Level 3 Safety Laboratory
OFB	French Office for Biodiversity
who	World Health Organization
OMSA	World Organisation for Animal Health
ORSEC	Organization of the civil security response
PECBMS	Pan-European program for monitoring common birds
PESA	Epidemiosurveillance platform in animal health
PNISU	National Health Emergency Response Plan
PNSE	National Environmental Health Plan
PRSE	Regional Environmental Health Plan
RAMSAR	Convention on Wetlands
RESAVIP	Pig influenza surveillance network
RSS (meeting)	Health security meeting
SAGA (Protocol)	Protocol for active surveillance of avian influenza
SAGIR (network)	Wildlife Health Monitoring Network
SpF	Public Health France/ <i>Santé publique France</i>
TAAF	French Southern and Antarctic Lands
TFIOM	Interdepartmental Task Force "One Health"
United States CDC	Center for Disease Prevention and Control (United States of America)
WAHIS (notification)	HPAI outbreak notification system to WOAH