ASSESSMENT

Country report: ECDC Public Health Emergency Preparedness Assessment for France, 2025

Under Article 8 of the Regulation (EU) 2022/2371

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Abbreviations

AAR	After-action review
ABM	French Biomedicine Agency
AMR	Antimicrobial resistance
ANRS-MIE	National AIDS Research Agency – Emerging Infectious Diseases
ANSM	French National Agency for Medicines and Health Product Safety
ANSES	French Agency for Food, Environmental and Occupational Health & Safety
ARS	Regional Health Authorities
ASNR	French Authority for Nuclear Safety and Radiation Protection (ASNR)
CBRN	Chemical, biological and radio-nuclear events
CCS	Health Crisis Centre
CDTR	Communicable Disease Threats Report
CHS	Centre for Health Security
CIC	Inter-ministerial Crisis Cell
CNIL	French data protection authority
CNR	National Reference Centre (Laboratory)
CORRUSS	Operational Centre for Response and Regulation of Health and Social Emergencies
CPias	Support centre for the prevention of healthcare-associated infections
CRAtb	regional antibiotic therapy centres
DGS	Directorate General for Health (Direction Generale de la Sante)
DREES	Research, Studies, Evaluation and Statistics Directorate
DREAL	Regional Directorate of Environment, Planning and Housing
ECDC	European Centre for Disease Prevention and Control
EFS	French National Blood Service
EEA	European Economic Area
EU	European Union
EU HIP	EU interoperability with HERA's IT platform
EWRS	Early Warning and Response System
HAI	Healthcare-associated infection
HAS	French National Authority for Health
HSCO	Health Security Communications Office
HCSP	High Council for Public Health
IHR	International Health Regulations
INCa	French National Cancer Institute
Ineris	National Institute for Industrial Environment and Risks
IPC	Infection Prevention and Control
IPCAF	Facility-level Infection Prevention and Control Assessment Framework
JADE	Joint Assessment and Detection of Events
JIACRA	Joint inter-agency report on integrated analysis of antimicrobial agent consumption and occurrence of antimicrobial resistance in bacteria from humans and food-producing animals
LTCF	long-term care facilities
MCM	Medical counter measures
MDRO	Multidrug-resistant organism
MLHSF	Ministry of Labour, Health, Solidarity and Families = Ministry of Health
NAAT	nucleic acid amplification test
NFP	National Focal Point
NIA	National IHR Authority
NGS	Next-generation sequencing
ORSEC	Plan for organisation of the civil security response
ORSAN	Plan for organisation of the response of the health system in exceptional health situations
PHSM	Public health and social measures
PoE	Points of Entry
RIF	Regional Intervention Fund
RSV	Respiratory Syncytial Virus
SIMEX	Simulation exercise
SISAC	Alert and Crisis Monitoring and Information System
SOP	Standard operating procedures
SNPIA	National Strategy for the Prevention of Infection and Antibiotic Resistance in Human Health
SPAR	State Party Self-Assessment Annual Report
SpF	Public Health France, the National Public Health Agency (Sante publique France/SpF)

Executive summary

Introduction

The aim of the Public Health Emergency Preparedness Assessment, as mandated in Article 8 of the Regulation (EU) 2022/2371 on serious cross border threat to health, is to improve prevention, preparedness and response planning in EU/EEA countries through the implementation of recommendations following individual country assessments. As specified in the Regulation, each EU/EEA country will undergo an assessment every three years, with the first cycle of these occurring between 2024 and 2026.

This report presents the findings and recommendations of the first assessment conducted in France. This involved a desk review of relevant documents, followed by a five-day country visit that took place between 23 June and 27 June 2025. As per the assessment methodology, all of the 16 capacities included in Article 7 of the Implementing Regulation (EU) 2023/1808 self-assessment template were assessed, with five of them considered in-depth: Laboratory (Capacity 3); Surveillance (Capacity 4); Health emergency management (Capacity 6); Health service provision (Capacity 7); and Antimicrobial resistance (AMR) and healthcare-associated infections (HAI) (Capacity 12). The report also provides specific recommendations for the country to improve prevention, preparedness and response planning. France is requested to provide an action plan addressing these recommendations within nine months of receipt of this report.

Key findings

France has a multifaceted public health system involving multiple stakeholders at different geographical and administrative levels, which is effective and operational with a high level of implementation for most of the capacities assessed. The public health system is centralised, with legislative, decision-making and coordination authority at the national level and strong dependence on the 18 Regional Health Agencies (Agence Régionale de Santé – ARS) for implementation and adaptation to the local context. The national public health strategy is defined by the Ministry of Solidarity and Health, with the contribution of the National Public Health Agency (Santé publique France). The strategy is implemented by the National Public Health Agency in collaboration with its regional representations (16) and other regional and local level actors.

As a result of lessons learned from the COVID-19 pandemic and in preparation for the Olympic and Paralympic games (2024), a coordination hub for management of health crises – the Center for Health Security (Centre de crises sanitaires (CCS)- was established (1 March 2024) within the Directorate-General for Health, in the Ministry of Solidarity and Health. There is a strong collaboration between different entities at national and regional levels which ensures a continuous information flow between the key stakeholders, rapid mobilisation of expertise and resources, and dynamic adaptation of plans in response to evolving threats. The roles of the National Public Health Agency, the Centre for Health Security and the Regional Health Agencies are pivotal for responses to health threats, including alerts, epidemiological situation awareness, scientific advice, risk assessment and communication.

The financing framework at the national and regional levels allows for the rapid mobilisation of the necessary funds with a solid mechanism in place to respond to public health emergencies at different administrative levels. In the event of a public health emergency crisis, there are strong connections in place within and between sections of the healthcare system and across sectors (public health, animal health, civil protection, etc.). The national preparedness and response strategy is based on intersectoral coordination mechanisms, with a robust and representative crisis governance. Comprehensive and adaptive legal instruments and procedures are in place to implement the IHR and provide a multi-sectoral response to serious cross-border health threats. There is a culture for performing regular assessments and conducting simulation exercises to test preparedness and response plans in the health sector. Extensive use of professionals in crisis situations, as part of a reserve of healthcare personnel, provides an opportunity for upgrading the required professional and organisational skills when responding to health threats.

The emergency plan ORSAN 'Organisation de la réponse du système de santé en situations sanitaires exceptionnelles' (organisation of the healthcare response system in exceptional public health situations) provides the national framework for the organisation of the healthcare system's response and support to regions and areas affected by an exceptional health situation, making it possible to mobilise resources and reinforce service provision. The regional ORSAN system is developed by the Regional Health Authority in each region. The national authorities do not validate regional plans, but provide necessary guidance (planning framework and objectives). More efforts could be envisaged for collecting structural feedback from regional and local levels to further improve planning activities and identify resource needs. The hierarchical system for health resource mobilisation is set to involve different geographical levels - national – 'zonal' (area-wide) - regional ORSAN - healthcare operators. There are well established mechanisms to ensure an increase in human resources in the event of a public health emergency – reserve of healthcare personnel or national solidarity mechanism, which are coordinated jointly at national and regional level. A dedicated national risk communication plan is in place which includes media, online and social media.

In an emergency, the national and regional authorities are able to quickly write or update procedures for health care professionals, activate response plans (national and regional), coordinate messages to health facilities and provide necessary advice for enhanced collaboration between primary care and hospital service providers to ensure continuity of care and surge capacities. There is a mechanism for cross-regional collaboration to support crisis response, however analysis of such efforts could be performed in a more structured and regular basis. Prevention, preparedness and response plans in France include the actual or foreseeable effects of climate change. A list of priority zoonotic diseases for surveillance, preparedness and response has been established based on human and animal health legislation, expert opinions and response procedures that are already available.

The surveillance system, composed of several extensive networks, combines data from laboratories, hospitals, general practitioners, and health insurance data, including statistical data on mortality. Upgrades and innovations have been implemented during and post-COVID-19 to capture sequencing, wastewater monitoring and real-time hospital data. Overall, the respiratory surveillance system is highly automated, comprehensive and robust, providing timely information to decision-makers regarding the epidemiological situation to inform public health measures. Challenges remain in regulatory arrangements to facilitate data linkage, vaccine coverage and effectiveness monitoring and contact tracing in pandemic situations.

The Centre for Health Security provides methodological support for development of recovery plans, guidance on simulation exercises (SIMEX), After-Action Reviews (AARs) and training programmes. Standards and indicators, based on ISO certification, are used for routine improvements and quality assurance.

Main recommendations for each capacity assessed in depth

Health emergency management (Capacity 6)

- Develop a framework to support the Regional Health Authorities (ARS) in their emergency preparedness and response activities; in particular for the creation and implementation of regional ORSAN plans and the provisions for cross-border collaboration and mutual support.
- Formalise the methodology and procedures for proactive national risk profiling and for national risk assessment of public health events.
- Develop a procedure with technical criteria to support decision-making related to emergency-level determination (up- and down-scaling).
- Improve inter-ministerial coordination relating to procurement efforts for Medical Counter Measures (MCMs).
- Continue efforts to transition towards a new information system to strengthen anticipation, information exchange, and real-time stockpile management. The new information system should integrate real-time tracking of stocks, planned procurements and logistics; both at strategic and tactical level.
- Request regularly targeted data from the French National Agency for Medicines and Health Products (ANSM): data on stocks, supply chain and availability of raw materials and Active Pharmaceutical Ingredients with regards to MCMs on the critical medicines list for shortages and MCM considered strategic for stockpiling.
- For strategic and tactical stockpile products outside the scope of ANSM, assess the reliability of existing supply channels and identify alternative sources as backup.

Laboratory (Capacity 3)

- Formalise coordination across laboratory types and risk domains for rapid response during health emergencies by strengthening communication and protocols, promoting joint crisis exercises, and mapping laboratory capacities between national and local laboratories in conjunction with Regional Health Authorities to improve emergency response.
- Ensure consistent ORSAN REB implementation by collaborating closely with Regional Health Authorities, providing clear guidance, sharing best practices, and supporting regional adaptation through ongoing engagement and exercises.
- Enhance laboratory reporting by emphasising its role in public health decision-making, improving data quality through regular laboratory feedback, and integrating more notifiable diseases to strengthen surveillance and system resilience.

Surveillance (Capacity 4)

- Adapt regulatory arrangements to facilitate linkage across relevant systems to enable more powerful and efficient use of existing data.
- Continue to implement and evaluate new surveillance mechanisms that opportunistically use health data collected for other purposes (Laboé-SI, Orchidée).
- Explore the possibility of creating a comprehensive national vaccine monitoring system to allow efficient national and regional estimates of vaccine coverage and vaccine effectiveness, particularly in emergency situations.

- Align activities in the area of wastewater surveillance – e.g. by drafting guidelines on response options following the detection of pathogens in wastewater.
- Prioritise the development of a national guideline and information system for contact tracing (or dedicated component in the existing system) to be applied during pandemics.

Antimicrobial resistance and healthcare-associated infections (Capacity 12)

- Raise public visibility of One Health Antimicrobial Resistance (AMR) efforts through cross-sectoral activities and awareness campaigns.
- Track national AMR spending to identify funding gaps and support interagency collaboration, including studies for the return on investment in AMR prevention.
- Automate and centralise AMR data reporting from labs to improve rapid detection, molecular analysis, and coordination across health system levels.
- Improve support to hospitals in meeting WHO Infection Prevention and Control (IPC) standards using the WHO facility-level Infection Prevention and Control Assessment Framework (IPCAF) and behavioural insights to address gaps in infection prevention and control.

Health service provision (Capacity 7)

- Strengthen support to regions for health service provision preparedness and performance during health crises.
- Enhance the role of primary healthcare as an essential service provider during public health emergency events.
- Support the hospital networks collaboration and a regular exchange of practices for public health emergency planning and crisis management.
- Continue to strengthen the preparedness of the health system (all levels) for a crisis related to serious mass casualties, by developing guidance and implementing procedures, and by providing the necessary training for health service providers.
- Collect and analyse reports from simulation exercises and After-Action Reviews (AARs) to ensure capabilities for sustainable health service provision during a crisis.

Conclusions

French authorities have extensive intersectoral and health-sector specific emergency plans in place. Guidance is provided from national level to the regional health authorities for the development of regional operational emergency plans, addressing all-hazard threats to health. There is, to some extent, heterogeneity in the creation and implementation of these regional plans, suggesting needs for targeted support through training, twinning and sharing practices, and by providing standard operation procedures.

The assessment team found a high laboratory capacity and well-coordinated surveillance system, with strong infrastructure, coordination, and technical capabilities in place, even if certain elements are not always formally codified. The country should continue to implement and further expand the digitalisation and process automation for public health data collection, analysis, surveillance and reporting tools, including automation of surveillance for multidrug-resistant organisms and hospital-acquired infections. Although the implementation of One Health AMR approach is regularly monitored, dedicated financing could be implemented, including studies on return on investment.

Planning for continuity of health services is based on the assessment of local capacities and risks. Technical and strategic intersectoral committees perform and validate mapping of the risks, while additional risk assessments are performed when facing a public health crisis. Further work needs to be done to better document procedures and methods. Although business continuity plans are regularly tested in hospitals, more efforts need to be focused on the primary care level.

In France, many good practices were observed in public health emergency preparedness planning, capability building, and response to health threats. This report provides specific recommendations for the country to improve prevention, preparedness and response planning. France is requested to translate these recommendations into an action plan within nine months of receipt of this report.

Introduction

The aim of the Public Health Emergency Preparedness Assessments, as mandated in Article 8 of the Regulation (EU) 2022/2371 on serious cross-border threats to health, is to improve prevention, preparedness and response planning in EU/EEA countries through the implementation of recommendations following individual country assessments. As specified in the Regulation, each EU/EEA country will undergo an assessment every three years, with the first cycle of these occurring between 2024 and 2026.

This report presents the findings and recommendations of the first assessment conducted in France. This process involved a desk review of relevant documents, followed by a five-day country visit.

Background and legal basis

During the COVID-19 pandemic it was recognised that the legal framework for combatting serious cross-border threats to health, provided for in Decision No 1082/2013/EU, needed to be broadened and enhanced to ensure a more effective response across the European Union (EU) to deal with health-related emergencies. Hence, the European Commission developed and published on 23 November 2022 the Regulation (EU) 2022/2371 on serious cross-border threats to health[1].

Within this Regulation it is recognised that prevention, preparedness and response planning are essential elements for combatting serious cross-border threats to health. In addition to creating a Union prevention, preparedness and response plan (Article 5 of the Regulation), the Regulation also outlined the importance of updating and seeking coherence with Member States' prevention, preparedness and response plans (Article 6 of the Regulation).

To monitor the implementation of the plans, the Member States shall report to the European Commission regarding their prevention, preparedness and response planning at the national level every three years. For this purpose, a self-assessment template was developed under Article 7 of the Regulation[2], complementary to the International Health Regulation (IHR) State Party Self-Assessment Annual Report (SPAR)[3].

In order to support the assessment of these plans, Article 8 of the Regulation indicates that the European Centre for Disease Prevention and Control (ECDC) has the responsibility – in coordination with relevant Union agencies and bodies – to conduct assessments of all 30 European Union and European Economic Area (EU/EEA) countries every three years. The procedures, standards and criteria for the assessments of the state of implementation of national prevention, preparedness and response plans and their relation with the Union prevention, preparedness and response plan are defined by the Commission Delegated Regulation (EU) 2024/1232, adopted in March 2024[4].

ECDC has developed a methodology for Public Health Emergency Preparedness Assessment to implement Article 8 of the Regulation (EU) 2022/2371. The assessment process addresses the 16 capacities included in the Article 7 self-assessment template and is designed to maintain consistency within the EU/EEA countries throughout the three-year cycle, while allowing for adaptation of plans if the national circumstances require.

Aim and objectives

The aim of the ECDC Public Health Emergency Preparedness Assessment process, drawn from Article 8 of the Regulation on serious cross-border threats to health, is to improve prevention, preparedness and response planning in EU/EEA countries through the implementation of recommendations following individual country assessments. Countries are asked to provide an action plan addressing the proposed recommendations of the assessment within nine months of receiving ECDC's report.

[1] European Commission (EC). Regulation (EU) 2022/2371 of the European Parliament and of the Council of 23 November 2022 on serious cross-border threats to health and repealing Decision No 1082/2013/EU. Brussels: EC; 2022. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R2371&from=EN

[2] European Commission (EC). Commission Implementing Regulation (EU) 2023/1808 of 21 September 2023 setting out the template for the provision of information on prevention, preparedness and response planning in relation to serious cross-border threats to health in accordance with Regulation (EU) 2022/2371 of the European Parliament and of the Council. Brussels: EC; 2023. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1808

[3] World Health Organization (WHO). IHR (2005) States Parties self-assessment annual reporting tool, 2nd ed. Geneva: WHO; 2021. Available at: https://www.who.int/publications/i/item/9789240040120

[4] European Commission (EC). Supplementing Regulation (EU) 2022/2371 of the European Parliament and of the Council as regards assessments of the state of implementation of national prevention, preparedness and response plans and their relation with the Union prevention, preparedness and response plan. Brussels: EC; 2024. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401232.

The specific objectives of the assessment process are to:

- Assess the countries' self-assessments of preparedness in the 16 capacities covered by the outputs from the most recent International Health Regulation State Party Self-Assessment Annual Report and the Article 7 template.
- Collaborate with countries to identify good practice, challenges, bottlenecks, gaps or areas for improvement concerning the 16 capacities referred to in Article 7 (a list of the capacities assessed is available in Annex 1).
- Encourage the inclusion of key elements within the prevention, preparedness and response planning structure such as cross-sectorial and cross-border coordination, crisis management, response governance, communication, plan testing, evaluation and regular reviews, according to the lessons identified from the response to public health emergencies.
- Use the opportunity of a standardised approach to the assessment process to contribute to the improvement of EU/EEA prevention, preparedness and response capacities by promoting a common understanding of key elements and a coordinated approach.
- Provide support to countries in enhancing their national prevention, preparedness, and response capacities through recommendations based on the assessment, and provide targeted assistance upon request.

Assessment process

An ECDC-led team, consisting of eight ECDC experts and four experts from the European Commission's Directorate-General for Health and Food Safety (DG SANTE) and the Health Emergency Preparedness and Response Authority (HERA), the World Health Organization (WHO) Regional Office for Europe and the Ministry of Health of Italy, was assembled to conduct the assessment, in collaboration with the country focal point and national experts from France. The assessment process consisted of a desk review phase and a country visit that took place during the period 23–27 June 2025.

As per the established process, the team reviewed France's responses to the Article 7 self-assessment questions, with five of them considered in depth: Laboratory (Capacity 3); Surveillance (Capacity 4); Health emergency management (Capacity 6); Health service provision (Capacity 7) and Antimicrobial resistance (AMR) and Healthcare-Associated infections (HAI) (Capacity 12).

The assessment mission was conducted with an open and transparent approach from the host country. Relevant documents to support the review of different capacities had been shared, including comprehensive summaries, which enabled the assessment team to understand the structures and prepare for the visit. During the coordination meetings, organised during the documentary review, dedicated teams met and exchanged information on the capacities assessed in-depth. During the one-week country visit, several key stakeholders were engaged in productive and collaborative discussions with the assessment team. The experts in the focal point team prepared and organised the preparatory meetings and the PHEPA country visit in great detail.

Further details regarding the practical aspects of the mission are available in Annex 2.

Main findings and overarching recommendations

France has 68.4 million inhabitants, living on the mainland and in the overseas territories. There are 13 administrative regions in mainland France (96 departments), while the overseas territories have the status of departments or regions[5]. Decentralisation is based on a legislative framework where regions, departments and communes are granted constitutionally protected local competencies, which is also true for the organisation of the health system. Responsibility for planning health system resources and capacity is shared by the Ministry of Health and the Regional Health Agencies, which enables regional authorities to meet population health needs more appropriately. However, there is significant heterogeneity in the health indicators and infrastructure of the regions, mainland and overseas territories.

The Ministry of Health contributes to inter-ministerial planning for national defence and security in terms of health and in a crisis it participates in the Inter-ministerial Crisis Cell. The newly established Centre for Health Security, in the Directorate General for Health ensures a more cross-functional crisis preparedness and management. The Centre is tasked with developing a consolidated strategy for preparing and anticipating health emergencies, to strengthen health alerts and operational response management, to reinforce the inter-ministerial crisis organisation and develop a common roadmap with all key partners. In collaboration with the National Public Health Agency, the Centre is involved in updating the framework for mobilisation of additional health workforce to respond to crisis situations, including deployments.

[5] Guadeloupe, Martinique, Guyane, Réunion, Mayotte, St Pierre et Miquelon, St Martin, St Barthelemy, French Polynesia, Wallis-et-Futuna, Nouvelle-Calédonie.

Created in 2010, the 18 Regional Health Agencies steer public health policy and regulate health service provision at regional level. They have an important role in the anticipation, preparation and management of health crises, in conjunction with the Prefect[6]. Thanks to the transversality and territorialisation of regional health policies, the Regional Health Agencies make it possible to create synergy between all the key players and serve as a single point of contact for all health actors in the regions.

At the national level, several health agencies complement this organisation. The French National Public Health Agency (Santé publique France) is responsible for epidemiological surveillance, monitoring health risks, prevention, health promotion, and preparedness and response to alerts and crises. Other agencies include the French National Agency for Medicines and Health Products Safety (ANSM), the French National Blood Service (EFS), the Biomedicine Agency (ABM), the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), the French National Cancer Institute (INCa), and the French Authority for Nuclear Safety and Radiation Protection (ASNR).

Although the public health system involves multiple stakeholders at different geographical and administrative levels, it is effective and operational, with a high level of implementation for most of the capacities assessed. There is a solid legal framework, enabling the legal instruments and procedures to be adapted to local context. The implementation of IHR capacities is monitored at national and regional level and policies are in place to sustain and strengthen these capacities. There is a strong basis for multi-sectoral collaboration in public health emergency preparedness and timely response to serious cross-border health threats.

Preparedness and response actions for a cross-border health threat were discussed in the context of a scenario. The readiness of epidemic intelligence and surveillance systems to identify and notify an event across sectors on a timely basis was noted. In the scenario a series of steps were discussed for a cross-border health threat where mechanisms and structures had to be activated to address the issue. The public health emergency preparedness and response was outlined, including aspects of surveillance and laboratory, health emergency management, risk communication, human resources, financing, health service provision, points of entry preparedness and other relevant IHR capacities. The authorities would be able to quickly convene meetings and begin collaborating to prevent importation or contain further spread.

The risk assessment methodology would be applied to document the situation and provide necessary evidence for the decision-making process. All relevant institutions would contribute to the production and dissemination of necessary documents and would follow the activation of certain steps, depending on the emergency levels, defined in the latest emergency planning framework. During the discussion, the agility and flexibility of the system was identified as a strength. In addition, close collaboration between key stakeholders was identified as a necessity to facilitate a timely reaction in a crisis. The powers of institutions to implement measures would depend on the situational urgency and the scope of responsibilities of each administrative level. However, as regional level authorities have a strong decision-making role, in the case of cross-regional and cross-border health threats the implementation of common measures could be challenging.

France has health workforce capacity to respond to a public health crisis. The planning of health service provision is the responsibility of regional health agencies. There are mechanisms to monitor utilisation and surge capacities in a crisis. The system of reference hospitals is used to enhance quality and provide necessary guidance in specific treatment areas. However, primary care physicians need to be more involved in public health emergency planning and response actions. In addition, cross-sectorial links for better recognition and implementation of the 'One Health' approach should be strengthened.

Recommendations

- Develop a framework to support the Regional Health Agencies in their emergency preparedness and response tasks by mapping their status and progress on key capacities (e.g. alert notification, surveillance and reporting, laboratory capacity, preparedness and response plans (ORSAN), health service provision, AMR, communication) and identifying strengths and weaknesses. Where needed, support can be provided –e.g. through training, twinning, exchanging best practices, provision of standard operating procedures (SOPs) and notification tools.
- Continue to implement and further expand the digitalisation and process automation for public health data collection, analysis, surveillance and reporting tools.
- Share good practices with key stakeholders across sectors, throughout the administrative levels in the country and with other countries.

[6] The State's representative in a department or region.

Findings and recommendations per capacity

A list of the capacities that were included in the assessment is available in Annex 1.

Capacities assessed in depth

Health emergency management (Capacity 6)

Management of health emergency response

French authorities have extensive health-sector specific and intersectoral emergency plans in place. The plans cover all-hazards to health, link with all relevant sectors and administrative levels, and are regularly tested. Preparedness plans and corresponding legislation have recently been updated following the COVID-19 pandemic and in preparation for the Olympic and Paralympic Games in Paris in 2024.

The ORSAN plan regulates the health emergency management, including operationalisation at regional level and healthcare provision. The plan addresses five types of hazards to health and has several transversal plans. The Health Crisis Centre (CSS) at the Directorate General of Health (DGS) in France has provided useful national guidance for the Regional Health Agencies to develop regional operational health emergency plans. Based on transnational framework agreements, France has several examples of good regional collaboration. Regional ORSAN plans vary to a certain extent in how they are created and implemented and in terms of cross-border collaboration and support. French authorities have proactively identified areas for improvement which, if addressed, would strengthen further France's overall preparedness.

At the governmental, inter-ministerial level, France has a pandemic plan and an intentional release plan for chemical, biological and radio-nuclear (CBRN) events. Furthermore, the ORSEC plan is the preparedness and response plan for civil protection which envisages multidisciplinary and multisectoral collaboration at all administrative levels.

The incorporation of previous smallpox, Ebola and pandemic influenza plans into one pandemic plan provides French authorities with a more generic preparedness provision, allowing for broader application and flexibility than stand-alone disease specific plans.

Nevertheless, some disease or topic specific instructions and guides are designed only for specific health events, such as measles and invasive meningococcal infections, or heat waves. They are often based on advice from the High Council for Public Health and the High Authority for Health. While these instructions and guides are not specifically related to health crises, they may be updated in the event of an epidemic or other exceptional health situation and, in this sense, sometimes be part of the operational response.

The same applies to the disease or topic-specific surveillance programmes and response plans of certain territories. Regional implementation of the preparedness activities allows for flexibility related to specific risks (e.g. arboviruses in Antilles or Réunion which may be considered as extensions to either ORSAN or ORSEC planning). This flexibility varies between regions and makes it challenging to assess the extent to which the variation appropriately reflects risks and needs.

Preparedness plans have diverse dimensions: health versus intersectoral, routine versus emergency, generic versus specific, and national versus regional. The French authorities have succeeded in finding a good preparedness framework, simple enough to be easily understood and managed, while still able to capture the wide variety of crisis situations. Without adding unnecessary complexity, they may want to review the relationship between the disease and topic-specific operational provisions and the generic plans, to further the consistency and guide the appropriate implementation.

In France, both proactive risk profiling, analysis or mapping and risk assessment of events are performed at national level. The former serves as input for the preparedness planning and activities, the latter as input for the incident management.

In 2024, a technical intersectoral committee performed a health risk mapping which has been validated by a strategic inter-ministerial committee. The risk mapping gives important indications for the focus of preparedness work in the coming years.

French public health authorities also monitor events through event-based surveillance and reporting, and make daily and weekly reports regarding the detection and follow-up of signals and alerts. A weekly review meeting allows for input from different stakeholders. For certain events, the authorities make ad-hoc risk assessments (e.g. for cyclone Chido in Mayotte).

The methods and procedures used to produce the national risk profiling and the national risk assessment of events could be better documented.

At the governmental level, the Inter-ministerial Crisis Cell (CIC), linked to ministerial operational centres, allows for flexible and scalable crisis management. The cell is composed of different functions and thematic cells which can be activated independently from one other. At the local level, departmental or zonal operational centres allow for sub-national crisis management, where the Regional Health Authorities represent the health sector.

For health emergencies, the Health Crisis Centre's Operational Centre for Response and Regulation of Health and Social Emergencies (CORRUSS) coordinates the response at national level, in close collaboration with the National Public Health Agency and the Regional Health Authorities. The Centre has defined four levels of activation for the health crisis management. The National Public Health Agency plays an important role in support of several response functions, including surveillance, epidemiological investigation, contact tracing, and vaccination campaigns or use of medical counter measures.

The emergency levels of different preparedness plans (governmental, public health, or institutional) are consistent within each plan but the relationship across plans requires further improvement. While each plan has a distinct scope and purpose, communication-wise the similarities and differences should be clarified further to anticipate difficulties that may arise during real emergencies. The emergency-level determination and transition process (up- and down-scaling) can be challenging and should be given specific attention to further improve preparedness. The use of technical criteria to support the decision-making related to emergency-level determination is expected to help in this respect.

Emergency situations can be mitigated and controlled through public health and social measures (PHSM), medical countermeasures (MCM) or communication. In addition to sound decision-making in relation to measures, it is also important to collect data on the measures implemented – e.g. scale (subnational, national), timeline (start, stop), character (advice, mandatory) and adherence (measured, estimated) – and to evaluate their level of implementation and effectiveness. In France, mitigation and control measures taken during events are captured as free text in the Alert and Crisis Monitoring and Information System (SISAC), but the different platforms used are undergoing further development and improvement. Further work can be done to improve the data collection and evaluation of public health and social measures.

Recommendations

- Develop a framework to support the Regional Health Agencies in their emergency preparedness and response activities, through mapping status and progress, and identifying strengths and weaknesses. Special attention should be given to the creation and implementation of regional ORSAN plans and the provisions for cross-border collaboration and mutual support. Share best practices to increase quality and efficiency in the emergency planning process.
- Formalise the methodology and procedures for proactive national risk profiling and national risk assessment of public health events. These procedures could clarify aspects such as which institution can request or take an initiative, which institution produces or contributes to the output, how external consultations are made, the tools used, arrangements regarding independence, approval process, and communication. The risk profiling and risk assessments should be data-driven and, where possible, follow an evidence-based approach.
- Develop a procedure with technical criteria to support decision making related to emergency-level determination (up- and down-scaling).

Emergency logistic and supply chain management

French authorities analyse priority threats at an inter-ministerial level to define major governmental plans. Based on this, the Ministry of Health specifically maps health needs, with input from experts. This includes input from the High Council for Public Health (HCSP). France has therefore identified its MCM list in accordance with the ORSAN system and based on expert advice. The MCM list is assessed annually, based on the evolution of risks and response capacities, both at national and regional level. This list is confidential and therefore it is a self-assessment to ensure that it fulfils all needs and is fully implemented by the National Public Health Agency by establishing the necessary strategic stockpiles. French authorities also self-assess tactical stocks at regional level.

When the estimated demand for the tactical stockpiles results in foreseen procurement challenges, the regions can request support from the National Public Health Agency to coordinate the procurement and create a pooling effect. If such a call for tender is also difficult, for example for niche products, the Ministry of Health can collaborate with the Ministry of Defence.

To monitor and avoid shortages, the French authorities work with the National Agency for Pharmaceutical Security and Products. Shortage reports are received on an annual basis, including regarding raw materials and finished products at each production site and pharmacy. Based on these reports with historical data, a risk and vulnerability analysis is conducted to better anticipate. Recently, a shortage committee was established to signal if products are no longer being marketed. This strengthens resilience and increases insight into vulnerabilities, enabling corrective measures for MCMs to improve crisis response. In addition, the committee can monitor the supply during a peak season. This year, France has included in law the obligation for pharmaceutical companies to declare contingency stockpiles live in the database. The information system is still undergoing some changes to be able to monitor real-time levels of stockpiles and locations in the country, but it is expected to be fully operational in 2026.

With regard to national policies and plans for monitoring supply and estimating demands for critical MCMs in the critical and tactical stocks, France is currently transitioning towards a new information system to improve anticipation, information exchange and the management of emergency stockpiles, ideally in real-time. This tool would not only monitor and improve the response coordination in times of crisis but also optimise procurement and finance management. One example for which an integrated platform has already been implemented is for mpox. Interoperable platforms are also needed to avoid hospitals having to submit the data manually.

France has separate systems for securing supplies of critical medicines against shortages. Information on its supply chain and securing critical MCMs for crisis preparedness and improvements have recently been made to all of these systems. It is not feasible to integrate the information tools for daily use of medicines and critical stockpiles, since the data the industry is providing to the French National Agency for Medicines and Health Products Safety is confidential. For targeted questions, this Agency can provide data on the supply chain, and availability of active pharmaceutical ingredients for products that fall within the scope of its mandate. However, in the strategic and tactical stocks there might be products that are outside of this scope. For those products the reliability of existing supply channels needs to be identified via alternative sources.

Recommendations

- Improve inter-ministerial coordination in relation to procurement efforts for MCMs. At present, pooling is only considered in exceptional cases for niche products when the procuring power is too low.
- Continue efforts to transition towards a new information system to improve anticipation, information exchange, and real-time stockpile management. The new information system should integrate real-time tracking of stocks, planned procurements and logistics, both at strategic and tactical level.
- Since the information tools for daily use of medicines and critical stockpiles cannot be integrated for legal reasons, request regular targeted data from the French National Agency for Medicines and Health Products Safety: data on stocks, supply chain, availability of raw materials and active pharmaceutical ingredients in relation to MCMs on the critical medicines list for shortages and MCM considered strategic for stockpiling.
- For strategic and tactical stockpile products outside the scope of the French National Agency for Medicines and Health Products Safety: improve oversight of marketed products, assess the reliability of existing supply channels and identify alternative sources as backup.

Laboratory (Capacity 3)

France has a highly developed and well-coordinated network of national reference centres, supported by strong coordination from the National Public Health Agency; these national reference centres contribute to surveillance and alerts, and provide advice and expertise on pathogens posing an epidemic and/or biological risk.

This system is integrated into a broad and functionally diverse network of biomedical laboratories and reference healthcare facilities, all operating under robust quality assurance frameworks that ensure consistency and reliability in diagnostic services. Coordination of this network is managed at national level by the Ministry of Health's General-Directorate for Health, in close collaboration with health agencies, including the National Public Health Agency, and at regional level by the Regional Health Agencies, enabling both strategic alignment and operational responsiveness across the country. This structure facilitates rapid information flow, harmonised protocols, and efficient mobilisation of laboratory capacity during public health events.

The system demonstrated significant diagnostic capacity during the COVID-19 pandemic, marked by the rapid development and deployment of nucleic acid amplification tests (NAATs), swift implementation of testing protocols, and the ability to adapt regulatory frameworks to meet evolving needs. These efforts were centrally coordinated by the Directorate General for Health within the Ministry of Health, which also oversaw the mobilisation of laboratory resources, personnel, and logistics to support the national response.

France currently has ambitious plans to expand its LABOé-SI electronic reporting system to support real-time disease surveillance. The system is designed for scalability and interoperability, and is expected to integrate additional pathologies by 2027, thereby enhancing national capacity for early detection, situational awareness, and timely response to emerging threats. This digital infrastructure will also support improved data sharing between laboratories, public health authorities, and clinical stakeholders.

The country maintains extensive BSL-3 and BSL-4 laboratory infrastructure and has nationally and internationally recognised capacity in next-generation sequencing (NGS), which supports genomic surveillance and pathogen characterisation. To further strengthen national preparedness, it may be useful for the Ministry of Health to undertake a comprehensive mapping of BSL-3 laboratories and their capacities, including geographical distribution, technical capabilities, and surge potential, to inform future planning and resource allocation.

Recommendations

- Formalise coordination across laboratory types and risk domains for rapid response during health emergencies.
  - Promote structured coordination between national and local laboratories, and across laboratory networks operating in the domains of epidemic response and biological threat. Establishing formal communication channels, response protocols, and inter-laboratory referral pathways can significantly improve interregional operational coherence. The formulation of intersectoral crisis support agreements may be considered to ensure response capacity in times of crisis. Joint simulation exercises, inter-sectoral meetings, and collaborative initiatives could harmonise procedures and ensure aligned responses during routine operations and public health emergencies.
- Implement an information system to map the nationwide laboratory capacities in conjunction with the Regional Health Agencies as part of ORSAN REB implementation, and to enhance preparedness and improve responsiveness in crisis situation by enabling centralised national level management.
- Promote the consistent and effective implementation of ORSAN REB plans across all regions through close collaboration with Regional Health Agencies. Where necessary, provide clear implementation guidance and share examples of good practice from regions where implementation is already advanced. Continued active engagement with the Regional Health Agencies, including exercises, will help ensure that plans are contextually adapted and operationalised at regional level.
- Reinforce efforts to expand and improve laboratory reporting to Laboé-SI by emphasising its central role in supporting timely public health decision-making and national situational awareness. Engagement can be strengthened through regular feedback loops with participating laboratories to improve data quality and system responsiveness. The timely and systematic integration of additional notifiable diseases into Laboé-SI is essential to ensure comprehensive surveillance coverage, improve early detection, and build a more resilient and future-ready reporting system, while minimising disruption to routine laboratory operations.

Surveillance (Capacity 4)

Surveillance of infectious diseases in France is coordinated by the National Public Health Agency, under the authority of the Directorate-General for Health (DGS). Key tasks include ensuring and coordinating the implementation of the national health monitoring system, national reference centres and health professionals (clinicians and medical biologists) who contribute to the various networks and surveillance systems. Sub-nationally, the Regional Health Agencies and the National Public Health Agency regional representations play a key role in surveillance. The National Public Health Agency has staff at regional levels, working in collaboration with the Regional Health Agencies, who contribute to the implementation of surveillance at regional level, aligning with local actors and partners while tailoring to local specificities (e.g. the enhanced surveillance of arboviruses in southern France and in some overseas territories). The French Agency for Food, Environmental and Occupational Health and Safety plays a strong role in the coordination of surveillance in food systems and animal health, liaising with the National Public Health Agency and under the direction of the Directorate General for Health.

France has well-developed national surveillance of infectious diseases, comprising more than 70 systems that collect epidemiological data and indicators on 38 mandatory and 31 voluntarily reported pathogens and health conditions. These systems draw on data from across the French health system, including 43 national reference centres, while also including data from sentinel networks in primary care and hospitals; syndromic surveillance systems using health data from outpatient medicine or emergency services; voluntary surveillance through laboratory or clinician networks; wastewater surveillance; a national system for reporting nosocomial infections, and mortality data.

Respiratory virus surveillance is comprehensive and includes all healthcare levels. Syndromic surveillance is carried out through the SurSaUD® system, which integrates data from primary care (SOS Médecins, a network covering 95% of SOS-Médecins general practitioner consultations in France), emergency services (OSCOUR, a network of 95% of emergency departments visits in France) and mortality (Insee, all-cause mortality monitoring of 85% of deaths in France, as well as CépiDC, which includes electronic death certificates covering about 45% of data on causes of death). All of the data within the SurSaUD® system is electronically transmitted on a daily basis to the National Public Health Agency, with automation of data extraction, integration and production of dashboards which enable real-time monitoring of health alerts, including influenza-like illness and severe acute respiratory illness. The SurSaUD® system is complemented by data provided to the National Public Health Agency by partners, including the Sentinelles network, which also carries out primary care surveillance.

The 3-Labos system uses data from a network of specialised laboratories which automatically extract and report data on a limited number of pathogens (24). Furthermore, the national reference centres for respiratory viruses manage two laboratory networks to ensure virological surveillance during the winter period. At hospital level, the RENAL network of nearly 40 laboratories performs screening tests and confirmatory analyses of influenza viruses (types and subtypes), SARS-CoV-2, Respiratory Syncytial Virus (RSV), rhino/enteroviruses, and metapneumoviruses. At community level about 1 600 laboratories in the RELAB network carry out detection of SARS-CoV-2/influenza/RSV via triplex PCR and link this to clinical data from patients testing for respiratory infections. Both RENAL and RELAB report weekly data on circulating respiratory viruses to the national reference centres. The national reference centres carry out phenotypic and genotypic characterisation of influenza viruses (typed or not), SARS-CoV-2 and RSV on a portion of the samples received.

The SUM'EAU system performs surveillance of selected pathogens at 54 wastewater treatment plants throughout mainland France. This system was developed in 2021 in response to an EU recommendation for SARS-CoV-2 variants by the Ministry of Health in collaboration with the Ministry of Ecology and with scientific support from the National Public Health Agency and the French Agency for Food, Environmental and Occupational Health & Safety. Sampling is performed and indicators are produced and published weekly at national and regional level. Short-term extensions of wastewater surveillance to additional pathogens, including seasonal influenza (A and B), poliovirus, mpox and measles, were made during the Olympic and Paralympic Games in 2024 in the Ile-de-France Region. The SUM'EAU project is not yet adapted to the objectives of the European Directive on Urban Wastewater Treatment, although this is planned. In the future, there is a need to clarify response options following the detection of pathogens under surveillance in wastewater.

During and after the COVID-19 pandemic, France identified the need to proactively address certain limitations that were identified in surveillance capacities. In addition to starting the SUM'EAU wastewater system, the EMERGEN platform was created in 2021 to centralise sequencing data for monitoring and research. To address the need to strengthen hospital surveillance, including the automated production of indicators, France launched the European-funded Orchidée project which aims to use aggregated, anonymised data from electronic health records for near real time surveillance to monitor severe forms of infection leading to hospitalisation. Orchidée currently collects data on severe acute respiratory infections from 25 hospitals and plans to expand to non-specific multi-thematic epidemiological surveillance from 2026, including AMR, healthcare-associated infections, severe bacterial infections, arboviral diseases specific to the outermost regions and other exceptional health situations. The current EU project funding ends in 2028.

The COVID-19 pandemic also highlighted the importance of real-time data collection from laboratories. During the pandemic period, virological surveillance was quickly scaled up from the previous SI-DEP system to systematically and automatically receive daily results of all tests performed by all public and private laboratories in mainland and overseas France via the LABOé-SI system. At present, the LABOé-SI system still focuses on viruses responsible for acute respiratory infections (SARS-CoV-2) however, the system is designed to be adaptable, allowing for the addition of pathologies as new public health priorities. France recently decided to switch to an orchestrator system for LABOé-SI, which aims to reduce the resources and costs associated with continuing and expanding the system. The possibility for flexible integration of additional pathologies into the LABOé-SI system is currently being studied, with implementation planned between 2026 and 2028.

Surveillance of respiratory pathogens and related health alerts in France is highly automated, enabling the provision of timely and high-quality data to inform public health action. Data from the systems are published in weekly bulletins during the respiratory virus season, and, when epidemiologically merited, during other periods. The Orchidée project could allow further automation and capitalise on existing electronic health records for public health surveillance at hospital level. There is good capacity for scalability in France's surveillance system, as evidenced by the high coverage of the existing system and the experience during COVID-19 with LABOé-SI, which could be further optimised with the orchestrator system.

Standardised guidelines and operating procedures are in place for the various surveillance systems and the systems are regularly reviewed and updated based on feedback, new alerts, or international guidelines. France can use data from its surveillance systems, supplemented by a robust network of research institutions, to quickly generate data on transmissibility, severity, immunological correlates of protection, and epidemic trajectories and impact for new and emerging pathogens.

Overall, the respiratory surveillance system is comprehensive and robust, providing timely information to decision-makers regarding the epidemiological situation to inform public health measures such as vaccination campaigns and care planning. The system is able to monitor critical indicators, including hospital bed and intensive care unit capacity, hospital emergency room capacity, hospital utilisation and testing capacity.

While the existing surveillance systems provide robust data to identify health events and monitor and evaluate health trends, linkage of data between systems has been complicated by the lack of a unique identifier for each patient, requiring the use of pseudonymisation or probabilistic matching, and by regulatory constraints. Data linkage including for vaccination, has been very complicated and, at times, impossible due to regulatory limitations on the interconnection of information systems. This impaired the reactivity of the system to evaluate vaccination coverage and vaccine effectiveness during the COVID-19 pandemic period, integrating data from both the public and private systems. Additional challenges relate to the need for a national guideline and scaleable information system for contact tracing beyond routine outbreak situations during pandemic emergencies.

Recommendations

- Continue to prioritise high-quality collection and facilitate the linkage of epidemiological, laboratory and vaccine data to guide prevention and identification of and response to health threats and, where possible, consider adapting regulatory arrangements, to enable more powerful and efficient use of existing data.
- Continue work to implement and evaluate new surveillance mechanisms that opportunistically use health data from other sources:
  - prioritise the implementation of the orchestrator mechanism for Laboé-SI, extending this surveillance to additional pathogens, depending on surveillance objectives and in the context of digitalisation of mandatory notifiable diseases;
  - continue the work to validate automated surveillance based on hospital data warehouses in the Orchidée project. Following evaluation of the efficiency and usefulness of the data yielded from the project, develop a plan to ensure the project's sustainability.
- Explore the possibility to create a comprehensive national vaccine monitoring system. This would allow for efficient national and regional vaccination monitoring, estimation of vaccine coverage and vaccine effectiveness in 'peace time' which could be employed to serve the management of emergency situations.
- Align activities in the area of wastewater surveillance by drafting guidelines on response options following the detection of pathogens in wastewater and through the adaptation of the SUM'EAU project to the objectives of the European Directive on Urban Wastewater Treatment. Wastewater surveillance should be guided by public health and health security (i.e. international outbreaks) objectives and, where used, integrated into the overall surveillance framework.
- Prioritise the development of a national guideline and information system, or a dedicated component within the existing system, for contact tracing in pandemic situations.

Antimicrobial resistance and healthcare-associated infections (Capacity 12)

France's inter-ministerial roadmap for AMR serves as the One Health national action plan on AMR, with clear objectives and indicators for the period 2024–2034. In addition to the inter-sectoral plan, each sector (human, animal, and environment) is responsible for implementing their AMR actions separately, as outlined in sector-specific plans. Inter-ministerial collaboration, coordinated by the Ministry of Health, occurs at both strategic and operational levels; regular inter-ministerial meetings aim to monitor roadmap progress and prioritise actions for the following year. All relevant ministries and agencies are considered to be essential stakeholders. Matching levels of engagement are needed from all sectors to ensure alignment of respective efforts and improved control of AMR. A common cross-ministerial budget for AMR is not feasible in France, however there are dedicated budget lines for AMR activities within the budgets of the various agencies involved in the inter-ministerial roadmap. Data and actions towards prevention of AMR across human and animal health are presented in publicly available annual reports. Further efforts towards integration of data and actions across sectors are underway, such as the development of cross sectoral data analysis and the One Health meta-network to fight antibiotic resistance (PROMISE). Following a first Joint Action, France remains very active in and leads the coordination of EU-JAMRAI 2; incorporating experience from EU-JAMRAIs into national and local action is a work in progress.

The 2022–2025 National Strategy for the Prevention of Infection and Antibiotic Resistance in Human Health (SNPIA) is based on an initial AMR plan (2016−2022) which was evaluated by the High Council for Public Health (HCSP). In addition, a preliminary analysis was conducted, validating the content, coherence and monitoring of the proposed 2022–2025 strategy. The SNPIA comprehensively integrates prevention of healthcare-associated infections (HAIs) and AMR within a more general infection prevention approach, encompassing viral, fungal, and bacterial infections. The Strategy underwent an interim evaluation and has been extended to 2027 with a focus on three areas: raising public awareness, using digital tools, and actions to structure the territorial network. It also allows additional time for work towards its ambitious targets. The implementation of the National Strategy is also supported by the Regional Health Agencies who guide local operationalisation, both for infection prevention control (IPC) and antimicrobial stewardship. They adapt the Strategy to regional contexts and engage with multidisciplinary networks of health professionals, thanks to a dense, experienced, multi-disciplinary and engaged network of health professionals. For instance, the twenty-six national guidelines for antimicrobial use that have been developed by the French National Authority for Health (HAS) are promoted in primary care, healthcare facilities, and medico-social facilities by regional antibiotic therapy centres (CRAtb), established in 2022 and coordinated with the Support Centres for the Prevention of Healthcare-Associated Infections (Cpias) to support local doctors (referents) trained to provide advice on the prudent use of antibiotics and to ensure that antibiotic therapy teams are multidisciplinary. The CRAtb's accomplishment is supported by the antimicrobial consumption data published on the National Public Health Agency's website and by additional evidence provided by the Research, Studies, Evaluation and Statistics Directorate (DREES) on antibiotic prescription among general practitioners, following indicators for prudent use of antimicrobials.

With regard to primary care, tools available online (e.g. Antibio'Malin) to communicate with patients are also promoted at national level and locally by CRAtb and Cpias. Hospital clinicians can seek advice from referent physicians, trained and identified as 'ambassadors of prudent antimicrobial use' to optimise their prescribing in real-time. The availability of such expertise would be valuable for the primary and medico-social sectors as well. The National Health Insurance Agency has piloted the analysis of individual prescriber data, which could be leveraged to establish more systematic and targeted feedback for prescribers. Individual prescriber feedback, accompanied by peer-to-peer dialogue, using social and behavioural science-based approaches, have been shown to support effective change in prescribing habits. Therefore, existing and validated methods to implement such approaches should be considered in future strategies.

The prevalence of HAIs and antibiotic use among hospitalised patients and residents of Long-Term Care Facilities (LTCF) remain higher than expected, as well as the respective HAI-attributable mortality rates. Similar to CRAtb in the field of antimicrobial stewardship, the centres for the prevention of healthcare-associated infections have supported regional HAI prevention since 1990. The support centres have multidisciplinary, highly motivated teams that cover all aspects of human health: ambulatory, facility, chronic or disability care. In particular, they facilitate the investigation and monitoring of outbreaks due to infectious pathogens. They also carry out training and communication activities for health professionals and organise IPC and AMR-related events or networks.

Five national missions have been developed to monitor antimicrobial consumption and resistance, hosted by some of the support centres for the prevention of healthcare-associated infections and regional antibiotic therapy centres under the supervision of the National Public Health Agency, to ensure that the objectives of the National Strategy 2022–2027 are achieved. Two of these missions are specifically dedicated to the Surveillance and Prevention of Antibiotic Resistance: SPARES for hospitals and PRIMO for primary care and medico-social facilities. Two other missions reinforce the prevention of surgical infection risk (SPICMI) and infections associated with invasive devices (SPIADI). The national reference centres conduct AMR reference testing, and EMERGEN 2.0 is the platform used to share genomic data. Mandated reporting of rare and unusual HAIs, including unusual resistance patterns occurs via e-SIN and alerts the support centres for the prevention of healthcare-associated infections, the Regional Health Authorities and the National Public Health Agency. In addition, the Laboé-SI and Orchidée systems are being developed to automate upload and centralisation of laboratory and clinical data for AMR and HAIs. Automation and streamlining are needed to ensure rapid notification and response to AMR and HAIs, as controlling healthcare outbreaks can reduce associated health and economic burdens. Molecular clusters of multi-drug-resistant organisms (MDROs) are currently detected at national reference centres, however, these are not communicated to the Regional Health Authorities and associated healthcare facilities in real-time for outbreak response. The High Council for Public Health issues and updates MDRO control recommendations, including systematic screening for patients hospitalised abroad in the past 12 months. However, further efforts are needed to ensure such recommendations are applied effectively. Further integration of implementation sciences, together with social and behavioural sciences, would be beneficial. In addition, further optimisation of data systems integrating and centralising laboratory and epidemiological data for MDROs and HAIs is needed for effective outbreak detection and response, conducted by local operational hygiene teams and mobile hygiene teams, and supported by regional support centres for the prevention of healthcare-associated infections.

Healthcare facility quality is regularly assessed by the French National Authority for Health using indicators that are updated annually (for example: antibiotic consumption, consumption of hydroalcoholic solutions). These are taken into account in the certification process for healthcare establishments (conducted by the French National Authority for Health). A centralised scoring system is not currently being used to evaluate IPC implementation in healthcare facilities and monitor progress towards meeting WHO's Core Components of IPC. It is recognised that IPC implementation can vary across healthcare institutions and capacity for support from the centres for the prevention of healthcare-associated infections can vary across regions. This can be exacerbated in areas where there is a lack of healthcare personnel, and patient-to-clinician ratios are higher.

Recommendations

- Give public visibility to the One Health approach to AMR by establishing cross-sectoral activities at national level. While reports on prevention of AMR using a One Health approach are compiled annually, the data and actions are still presented separately by sector, and most public-facing activities are sector-specific. One or more activities that bring together the sectors in a public-facing manner can engage a broader audience. This will facilitate a better understanding of the concept and scope of 'One Health', and then strengthen the national commitment to AMR prevention with a One Health approach. Consider inter-ministerial collaboration on broad-reaching public awareness campaigns.
- As a step towards ensuring sustained funding for One Health AMR activities, follow national spending on AMR across agencies. Such documentation could be used to identify funding gaps and potentially facilitate intersectoral collaborations that would require co-founding across agencies. Consider studies to estimate benefits and returns on investment in AMR prevention.

- Prioritise work towards automated uploading and centralisation of AMR data from medical laboratories. Automation and centralisation of AMR and HAI surveillance data will facilitate coordination of rapid threat detection and response. Systems that facilitate data sharing between hospital, medical laboratories, regional, and national levels should also allow for transmission of molecular data; rapid turnaround times for molecular analyses and cluster detection are needed to support efficient control of MDRO outbreaks.
- Improve support for all hospitals to enable them to meet the WHO Core Components for IPC by using the Facility-level Infection Prevention and Control Assessment Framework (IPCAF). Continue to incorporate social and behavioural science insights for improvement strategies to fill gaps identified in IPC monitoring and HAI data.

Health service provision (Capacity 7)

The Public Health Code (Code de la santé publique) regulates functions of the French healthcare system to ensure health service provision in the event of a public health emergency inducing an increase in demand for health services. The legal framework describes the ORSAN system and its objectives, as well as the responsibility of the Regional Health Agencies, which oversee preparation of the regional operational plans and coordination of different health service providers. Moreover, there is a clear legal provision for the hospitals' responsibilities to prepare an operational plan for scaling up hospital capacities and adapting to an increase in demand for health services in the event of a public health emergency. The same applies to medical and social facilities. Although the outpatient sector is encouraged to have mobilisation plans for coordinated community medical practice structures, there is as yet no legal obligation to have such plans.

The legal framework also sets out the obligation for healthcare providers to have business continuity planning to ensure service provision if the normal functioning of the system is disrupted. In addition, legislative acts provide the necessary basis for service providers to establish security measures in healthcare facilities. The government plans ensure intersectoral collaboration to respond to a pandemic, caused by an emerging or re-emerging highly pathogenic disease which causes human-to-human transmission (whether natural or accidental). Health crisis preparedness and management involves interdisciplinary coordination between hospital services, rescue services, laboratories, medico-social institutions and individual health professionals. In the context of managing a health crisis, interdisciplinary coordination meetings are organised on an ad-hoc basis with the relevant actors. These interdepartmental coordination meetings are organised both at national and regional level to discuss response measures and secure service provision.

In 2024, several provisions were adopted to reinforce the preparedness of the healthcare system to deal with exceptional situations. The French integrated framework for preparedness and response to health emergencies consists of five ORSAN operational plans with nine specific cross-cutting provisions. The national ORSAN framework is further elaborated and implemented as a comprehensive system by the Regional Health Agencies in conjunction with local healthcare structures. At local level, healthcare structures implement the ORSAN measures within their plans for hospital management in exceptional situations.

The national authorities developed a methodological guide to support regional and local stakeholders in developing the regional ORSAN system (2024), including guides on drawing up hospital plans for a health crisis situation, including business continuity and security plans. The principles for scaling up activities in a health facility are based on the provisions set out in the ORSAN plan. In connection with the need to upscale, health personnel are deployed to facilities which would need additional workforces to manage a crisis situation. In a health crisis, the care pathways are reviewed, and authorities seek the most efficient approaches within each region. This involves taking into consideration the specific features and the availability of local resources in outpatient, hospital and medico-social services, as well as among the individual outpatient healthcare professionals and the private sector. The system for heath service provision is flexible in order to minimise the impact of a health emergency, while allowing health service providers to scale up in order to absorb the increase in activities linked to one or more health emergencies.

The national plans do not include modelling of potential impacts, but the various possible consequences are taken into account. The Ministry of Health's methodological guide for the development of the regional ORSAN system indicates to the Regional Health Authorities the need to draw up a risk map as part of the planning process. Risks need to be mapped to determine the types of response to be used in an emergency. An inventory of the capacities of the healthcare institutions, including health transport resources, determines the capacity to provide adequate care, and this is then used to develop an annual or multiannual programme to maintain or develop the health systems' capacities.

The operational plans for the continuity of hospital services, including a clearly defined set of essential health services, are tested regularly, and the lessons learned are used as feedback and to revise the planning process. Moreover, hospitals must prepare plans to secure infrastructure and cybersecurity. The methodological guides for drawing up these plans indicate the need for updates and revisions on an annual basis as a minimum, and every time the organisational structure is changed. Hospital providers are also obliged to have a business continuity plan in order to obtain their certification by the High Authority of Health. The plans are tested and evaluated by the Regional Health Authorities and the health facilities who choose the timing for the testing. Plans can be tested full scale, or authorities can choose to test particular parts pf the plan. The national guidelines recommend simulation exercises as a testing method, involving all relevant stakeholders. The guidelines also stress the importance of collecting feedback on real-life situations. This enables lessons learned to be incorporated into operational planning

for health service preparedness to cope with increasing demand for care and the need for a potential surge in the health workforce. For healthcare services identified as being of vital importance there is a specific regulatory obligation to draw up business continuity plans.

The ORSAN plan is validated by the Directorate-General of the Regional Health Authorities and by the departmental prefectures. It is provided to the Ministry of Health for information purposes, not for validation. In fact, the national level only complements when the management capacities of a region or area are exceeded. Indeed, intervention at national level only occurs when regional or territorial management capacities are surpassed or when exceptional health situations require national regulation of scarce capacities (burn victims, paediatric intensive care, highly contagious infectious diseases, etc.). The progress and implementation of the plans is monitored each year, but there is no consolidated analysis of the regional plans. However, exchanges are regularly organised between the Ministry of Health and the Regional Health Authorities to take stock of the planning, answer questions, tackle difficulties encountered at national or regional levels, or highlight and share good practices.

With regard to outpatient healthcare, plans for continuity of services exist but are not, or insufficiently, tested through exercises. The Regional Health Authorities are in charge of testing plans addressing ambulatory primary healthcare continuity arrangements, in connection with national health insurance. The only intervention at national level is to formulate methodological recommendations on how to involve ambulatory primary healthcare professionals in the ORSAN planning. Regional Health Authorities should increase the integration of outpatient healthcare professionals into regional exercises, to help primary care professionals test their preparedness for increased service demand or surge capacities in crisis, and help identify areas for improvement.

There are disparities between the different types of healthcare providers (hospitals, medico-social institutions, outpatient providers and laboratories) in terms of the internal resources available to ensure business continuity. Health institutions, depending on their care capacities (volume and diversity) and areas of expertise, can play a structuring role in regional planning led by the Regional Health Authorities. The regional reference health facilities, which have specific expertise on a particular risk (mass casualties, nuclear/radiological, infectious and epidemic, chemical and toxicological), support the Regional Health Authorities in structuring the care pathways and providing training activities and methodological support for first- and second-line healthcare facilities. Outpatient professionals are also integrated into the organisation of the health chain to deal with a health emergency. Depending on the events, they can be integrated into the response patterns of health emergencies. However, the level of support offered to primary care providers and medico-social institutions, both public and private, by the Regional Health Authorities in crisis preparedness needs to be strengthened.

The ORSAN planning provides for prioritisation of the provision of health services to ensure sufficient continuity of care. It plans to prioritise certain health facilities, according to their categorisation. For outpatient primary health care services and laboratories outside health facilities, the level of prioritisation for their continuity of service depends on their level of participation in the management of a crisis. This level is defined by the Regional Health Authorities according to the nature and severity of the health emergency. The arrangements for the gradual inclusion of these health services are provided for in the ORSAN system, allowing for the flexible management of the various services.

A mapping of reference health facilities, their capacities (beds, equipment, pathways and care pathways), and specialised means of transport exists at the national level. In collaboration with the Regional Health Authorities, the reference hospitals play an important role in strengthening capacities and contributing to the development of methodological support for other health facilities. The national guidelines on the clinical management of cases during priority health events are implemented at all levels and regularly applied (where appropriate), reviewed, evaluated and updated. Training is prepared, based on these national guidelines, defined by the Ministry of Health and the Regional Health Authorities, in conjunction with healthcare operators. The reference institutions have the necessary resources to support targeted training programmes and develop operational procedures for patient care, in collaboration with learning societies.

In France, there is a high-level use of health services, which is regularly reviewed, assessed and updated for planning purposes. Although there is no specific authority or mechanism for this control during emergency situations, after an emergency or crisis situation is over, a review evaluates the response and performance of health institutions and the system as a whole. The assessment of health facilities is also carried out as part of their certification by the High Authority for Health and within the framework of inspections carried out by the Regional Health Authorities.

Each Regional Health Authority maps care capacities, based on a systematic and regular approach to identify and update the resources available in the region's health facilities, including private facilities. This mapping provides an overview of the care available to optimally respond to exceptional health situations. In the event of a public health emergency, the authorities can obtain a list of available health services by using a tool (Operational Resource Directory) which visualises the supply of health resources and facilitates efforts to find places for patients in intensive care. In addition, the tool provides continuous visibility of the capacity of healthcare establishments, facilitating the management of resources.

In terms of forecasts, stakeholders can assess the health capacities available by using a census methodology (detailed inventory of the healthcare resources available in public and private establishments, covering reception capacities (beds available), medical skills, specific medical equipment, etc.) and guide the involvement of in-and out-patient professionals during response. In the event of an unexpected serious event, the authorities would carry out surveys of their health facilities to identify the capacity available in the region. On this basis, and depending on the location of the emergency, different tools (including a map module) offer an optimised picture for decision makers.

This assessment is based on the SI-ORSAN, an information system designed to assess care capacity in healthcare establishments. This information system, based on the ORSAN capacity assessment doctrine, is made available to the Regional Health Authority, Emergency Medical Team (EMT) and healthcare establishments to support regional planning in responding to exceptional health situations (ORSAN system) and, in turn, healthcare establishments depending on their positioning (first line, second line, third line). The SI-ORSAN contributes to the ORSAN planning work (assessment of care capacity) and also to the management of exceptional health situations, or simulation exercises, by providing a 'dashboard' for crisis management, such as the mass reception of victims potentially requiring complex care pathways (severe burns, irradiation, serious poisoning). It also helps with the direction of patients in the event of MEDEVAC from hospitals or medico-social establishments. This dashboard helps anticipate and monitor reception capacities in healthcare establishments, identify reinforcements and project them in real-time traffic conditions throughout the national territory. SI-ORSAN also facilitates simulation exercises and training by having a database covering 30 years of feedback from health, safety and environment experiences in Europe.

In France, the legislation has specific provisions (bilateral or multilateral agreements) for medical transfers of patients to neighbouring countries (cross-border transfers) and for regional authorities regarding the conditions and operational arrangements for such transfers. Agreements are also in place for specific care sectors involving critical resources – e.g. care of burn victims. In the event of a severe crisis (such as COVID-19) France can transfer patients abroad to respond to the risk of hospitals becoming saturated during the peak of an epidemic. Instructions, drawn up according to the specific situational assessment (e.g. Instruction DGS/CCS/2020/71 of 18 May 2020 on the organisation of sub-regional, inter-regional and international transfers of healthcare professionals and COVID-19 patients) provide the framework and procedures for medical evacuation of patients, and serve as a reference for the organisation of medical patient transfers abroad during health emergencies. With regard to medical transfers of foreign patients to France from countries experiencing a health emergency, medical repatriation operations may be organised on an ad hoc basis by the Ministry of Health in conjunction with the Ministry for Europe and Foreign Affairs. There are several mechanisms for mobilising and deploying French medical teams to other countries to reinforce response capacities.

In summary, health service provision is regulated by the legal framework enabling harmonised planning for hospitals and Regional Health Authorities, based on recently updated national guidelines. The regional authorities retain the freedom to develop their plans, but within the imposed framework of the ORSAN system (adaptation to territorial contingencies), while at national level the legislative framework and planning objectives are defined and methodological support is provided. The territorial and operational planning allows strong coordination between health authorities and healthcare service providers and is based on efficient tools and methodology to rapidly map and evaluate the capacity of health services in emergency situations (including ICU). This enables health authorities to have an exhaustive overview of response capacities and to identify their breaking points. Plans are in place that ensure the ability to tailor the organisation of health services in order to minimise the impact of a health emergency. These plans also help with scale-up, in order to absorb increased activities linked to one or more health emergencies. Based on strengthened civil-military cooperation, use of military resources can be activated to support surge capacity, if needed. Well-established mechanisms exist to ensure mobilisation of the resources needed to cover health service provision in crisis - a call for national solidarity and the use of a reserve of health professionals.

Since COVID-19, the authorities have enhanced the use of research to support evidence-based decision-making approach and promote application of social science to adapt response messages for specific population groups. Moreover, medical professionals are obliged by law to prepare for health emergencies as part of their contractual agreement with health insurance institutions. National and regional health authorities can quickly write or update procedures for healthcare providers to respond to an event and have tools and methodologies to rapidly map and assess the availability of health services. This includes the monitoring of emergency service usage during a public health event. The continuity of health services is based on the assessment of local capacities and risks. Business continuity plans are regularly tested at hospital level, but more focus is needed at primary care level.

The remaining challenges relate to coordination and support for planning at national level for the regional/zonal levels; enhanced monitoring of the development and implementation of regional ORSAN plans; reinforcement of the hospital network in relation to emergency crisis preparedness and management, and support from health authorities for outpatient primary care services and laboratories in their preparedness planning for health emergencies.

Recommendations

- Strengthen support to regions for health service provision preparedness and performance for health crises by:
  - promoting sharing of sub-national ORSAN plans and implementation practices to facilitate understanding of enabling factors and challenges;
  - periodically evaluate the implementation of ORSAN plan methodology at regional level and use the lessons identified for further improvements.
- Collect and analyse reports from SIMEX and AARs conducted and share lessons identified with key stakeholders (within the same region and cross-regions).
- Continue to invest in public health emergency training sessions for all categories of health workforce to ensure up-to date knowledge, roles and responsibilities during crisis.
- Enhance the role of primary healthcare as essential service providers during public health emergency events.

Other capacities not assessed in-depth

Policy, legal and normative Instruments to implement the International Health Regulations 2005 (Capacity 1)

France has harmonised policy, legal and normative instruments to implement the IHR within its multi- sectoral and multi-level preparedness and response framework. The emphasis is on the subsidiarity principle, allowing for rapid action at the relevant level, while ensuring a feedback mechanism to the national level through the Operational Centre for Response and Regulation of Health and Social Emergencies (CORRUSS) communication and coordination systems, such as the Alert and Crisis Monitoring Information System.

The Operational Centre for Response and Regulation of Health and Social Emergencies, which is part of the Health Crisis Centre, established in March 2024 under the Ministry of Health, fulfils the role of the IHR National Focal Point (NFP). Discussion with stakeholders (an example being the response to a botulism outbreak in Bordeaux in 2023), confirmed the capacity of the Centre to fulfil mandatory components of the IHR NFP terms of reference, including a 24/7 duty officer function for urgent communication under the IHR. Processes for dissemination of information and consolidation of inputs from stakeholders in the health sector is a routine activity organised via daily alert bulletins by the Centre, along with a regular health security meeting that is attended by the Directorate-General for Health and other relevant government bodies, health authorities and agencies. The procedure supporting the task of centralising all alerts and ensuring the management of health emergencies is described in the relevant instruction. This empowers the Centre in the role of the IHR NFP to make use of expertise as needed from a network of key agencies at national and regional levels. In the event of a cross-sectoral crisis, an Inter-ministerial Crisis Cell is activated that provides a forum for further coordination with other sectors, in particular civil protection.

The Health Crisis Centre and the Operational Centre for Response and Regulation of Health and Social Emergencies participate in international exercises organised by the EU and WHO, such as the regional IHR NFP exercise JADE and national exercises, and play a key role in contributing to IHR awareness for identified risks.

Public health crises often involve other sectors, therefore further alignment of emergency management procedures with other sectors and the development of a shared information system under the Operational Centre for Response and Regulation of Health and Social Emergencies would be beneficial.

According to discussions with the IHR NFP for France, the country is currently adjusting legislative and administrative arrangements to establish a National IHR Authority (NIA), which will further improve coordination structures and mechanisms at national level.

Recommendations

- In implementing the new obligations introduced by the 2024 IHR amendments, France should ensure that the health authority designated as the NIA is supported by a strong legal foundation, appropriate normative instruments, and a clear mandate to effectively coordinate IHR implementation.

Financing (Capacity 2)

The state can mobilise financial resources to deal with health emergencies and funding is anticipated or activated, depending on the scale of the crisis. In the state budget, two specific funding arrangements are available each year to meet an emergency public health need: the precautionary reserve established within the Ministry of Health and each health institution; and the decrees for budgetary transfers. The state budget, like the health insurance budget, is approved annually by parliament. However, there could be challenges related to the capacity to mobilise resources to respond to a serious, protracted health crisis, affecting the entire population (e.g. COVID-19 pandemic). Moreover, the frequency of events can increase, which might require substantial financing of response measures for many consecutive or parallel events.

There are several institutions responsible for budgetary planning and execution. The Directorate-General for Health (DGS) is responsible for coordinating the preparation and organisation of the health system's response to health emergencies. During crisis management, it can ensure the financing of certain measures through its budget

programme for interventions. The Ministry of Health and the Ministry of Finance have specific procedures for coordinating policies and activities in the event of a public health emergency. As part of its national policy of inter-ministerial exercise, France has not tested its financial coordination mechanisms, since managing recent examples of real exceptional situations has demonstrated the country's ability to quickly mobilise funding to respond to health emergencies. This has resulted in the use of various reserves and contingency funds (regional intervention fund by the Regional Health Authorities or ministerial budget programmes) or in the release of ad hoc funds in the context of inter-ministerial arbitrations. If necessary, a proposal for amendment to the finance bill can be submitted to Parliament, as was the case during the COVID-19 pandemic.

The legal financial framework (2001) divides the appropriations of the general State budget by missions, programmes and action, according to the purpose of the expenditure, where a mission brings together a set of programmes that contribute to the same public policy. The elements in the annual state budget allocated to public health emergencies include organisation of health surveillance and vigilance; anticipation and preparedness for health crises; management of health alerts and crises; and European stocks RescUE. There is no specific emergency budget to support action in the event of a public health emergency. However, at the beginning of the year, a precautionary reserve is set up from the appropriations of each programme, an essential tool for budgetary regulation, intended to cover expenditure contingencies that may arise during implementation.

There are specific procedures and budgets to support regional actions in the event of a public health emergency. The Regional Intervention Fund (RIF) finances action for prevention, health service provision, and social medicine programmes on the basis of decisions taken by the Regional Health Authorities. There is no predetermined crisis budget in the RIF. In the event of a public health emergency, a Regional Health Authority may, if necessary, expeditiously incur expenditure from the treasury of its RIF. Depending on the size of the expenditure, a replenishment of the RIF can then be considered at national level. This mechanism allows a certain agility and responsiveness, even in exceptional health situations.

Funding for emergency measures can come from different channels. One challenge is to define the various funding channels to identify the one that appears to be the most appropriate, depending on the expenditure to be incurred and its nature. Therefore, the Ministry of Health is not the only decision-maker involved in financing during a crisis and it may be necessary to resort to inter-ministerial arbitration in some instances. In crisis situations, specific measures can be put in place to help vulnerable people and facilitate their access to care (e.g. distribution of masks), as part of the financing of social security. The Regional Health Authorities, using the RIF, can finance 'go-to' actions with these populations, via contracts with associations or other public or private operators. Allocation of public funds to private or non-governmental actors is based on the implementation of grants.

Another issue concerns the sharing of information between the teams in charge of alert management and the directorates in charge of funding. Therefore, the establishment of a set of procedures dedicated to the preparation and anticipation of health crises makes it possible to involve the directorates in charge of funding in the decision-making process as soon as possible. Regarding IHR implementation, there is no dedicated budget programme. The financing of essential crisis preparedness and response capacities is based on the budgets of the various ministries, according to their competences. At the time of PHEPA assessment, there was no designated authority to coordinate the distribution and execution of IHR-related expenditure. Each ministry is responsible for actions within its area of competence. The scope of the future national authority's mandate under the amended IHR provisions is planned to enter into force in the autumn of 2025.

The Budget Directorate is responsible for monitoring and steering the implementation of state expenditure in a cross-cutting manner. It ensures the regulation of management, the sustainability of public expenditure and the compliance of implementation with the budgetary commitments made before Parliament in the context of the budget laws, particularly regarding compliance with the State's manageable expenditure standards. In the event of local alerts, emergencies or exceptional health situations, each Regional Health Authority may, if necessary, rapidly commit appropriations from the treasury of its RIF. Depending on the size of the expenditure, a replenishment of the RIF can then be considered at national level. In addition, the National Public Health Agency must mobilise extra resources to respond to a crisis (e.g. procurement of health products), and therefore may make additional budgetary appropriations to the budget already allocated for the preparation and management of health crises. The Budget Directorate carries out a periodic analysis of expenditure implementation which is comprehensive and looks at each budgetary item in detail, at programme and at mission level.

In essence, the financing framework for the response to public health emergencies at national and regional levels allows for the rapid mobilisation of the necessary funds and has a solid financial mechanism in place (budgets and funds) to respond to public health emergencies at different administrative levels. The financial incentives for implementation of activities (preventive and control) in relation to public health emergency events are embedded into the mechanisms for accreditation and licensing of health providers. Reference hospitals receive additional resources to operate in emergencies and to offer methodological support. Specific funding is also available for maintaining the reserve of health professionals. Funds can be mobilised rapidly to tackle a public health emergency. However, these funds can flow from different sources, creating complexity in the system.

Recommendations

- Identify and map the most appropriate funding sources to support and secure implementation and sustainability of activities for crisis prevention, preparedness and response.

Human resources (Capacity 5)

Human resources are available as needed in all relevant sectors at national, intermediate and local level to detect, assess, report and respond to events. Staff deployment to areas with surge capacity in crisis is regulated by the legal framework. There are well established functioning mechanisms to ensure surge in workforce capacity for different types of health services – hospital, outpatient primary care, laboratory services and other public health services. Moreover, policies are in place to retain the health workforce and mechanisms are regularly assessed.

The public health emergency preparedness and response operational and business continuity plans of healthcare institutions allow a rapid mobilisation of human resources. These plans ensure an immediate operational response in the event of tension or disruption in the provision of care. These provisions are complemented at regional level by the ORSAN mechanism, which also organises the mobilisation of HR when reinforcement is necessary. Furthermore, several national arrangements have been put in place and deployed in recent years to respond to the crises facing France, Europe and the world. These mechanisms are now part of an overall strategy for mobilising reinforcements of human resources.

The health reserve, created in 2007 and managed by the National Public Health Agency under the authority of the Ministry of Health, is one of the key mechanisms for strengthening the health system. The health reserve plays an essential role, both domestically and internationally, and requests are regularly made to it. The reserve consists approximately 50 000 listed volunteer professionals who are active health professionals, students, or retired individuals, and also administrative and technical staff. The health reserve facilitates rapid and coordinated mobilisation of a very wide range of skills. An agile and resilient tool, the reserve can be used to support hospitals, outpatient primary healthcare, laboratory services (outside hospitals) or other public health services. The National Public Health Agency provides regular, theoretical and practical training for reservists. In-person training courses are subject to an annual training plan. An e-learning training offer is also available. The National Public Health Agency also manages the selection, logistics and compensation of the professionals listed in the reserve. Following a mobilisation of reservists, feedback is systematically organised as part of a continuous improvement process.

In the context of particularly intense and protracted crises or when local reinforcements and capacities are insufficient, the 'national solidarity' mechanism organised by the Directorate-General for Health makes it possible both to reinforce the action of the health reserve and to make available profiles of which there were insufficient numbers in the reserve pool. This mobilisation strengthens the overall response capacity. Regional Health Authorities can also call on voluntary professionals from their region or neighbouring regions, according to different mechanisms and methods. The zonal plan and the coordination for the mobilisation of health resources allows rapid transfers to the most affected territories. The reinforcement of human resources between regions is managed at national level by the Ministry of Health. Finally, reinforcements from the central administration can also strengthen the Centre for Health Security when the severity of the crisis requires such action.

These mechanisms have been tested and worked efficiently in recent health crises (COVID-19 and the 2024 cyclone Chido in Mayotte). When using the health reserve and national solidarity schemes, which are enlisted under exceptional circumstances, multisectoral workers (health professionals, engineers, technicians, crisis managers, etc.) are engaged according to local needs. Since the COVID-19 pandemic, the arrangements for mobilising the health reserve by the Regional Health Authorities have been adapted and are based on an analysis and prioritisation of requests for mobilisation. With regard to international operations, the International Health Task Force of the health reserve can be mobilised. Given the sensitivity of missions abroad, the aim is to have an international health task force made up of health reservists trained in international health diplomacy who can be mobilised quickly. France also supported the creation of the WHO Academy (in Lyon), with the aim of providing innovative training for professionals from all around the world on what have been identified as priorities for global health.

In France, there is availability of human resources for the implementation of IHR and there are multiple stakeholders to support workforce surge during a public health event. However, as the health system is facing the risk of human resource shortages, as in many countries, the efforts of health policy makers are directed towards ensuring health system resilience. This is done by strengthening the role of health professionals and implementing specific incentives for more equal geographical distribution of medical professionals to avoid areas with shortages of medical personnel. To succeed, career attractiveness and continuous training and competence building are a priority.

Recommendations

- Assess the training needs at regional and local level and, if needed, strengthen capacities and capabilities for evaluating the impact of a crisis on health services and for planning mitigation action.
- Organise discussions with key stakeholders to identify the challenges they face in implementing action to plan for continuity of health service provision and use this information to update training packages. Actively involve local key stakeholders (e.g. Regional Health Authorities, hospital networks, medical professional associations and possibly local communities) to strengthen multisectoral implementation of strategic plans.
- Elaborate guidance on practical aspects of ORSAN implementation for primary healthcare providers, to enhance their role as essential service providers during public health crisis.

Risk communication and community engagement (Capacity 8)

France has well-developed, multi-modal strategic and reactive risk communication, community engagement and infodemic management activities, focusing on health promotion and disease prevention as well as crisis communication in response to critical alerts or events. Good practices with respect to the integration of communications for prevention, community engagement, risk communications and crisis communications are employed in both routine work and health emergencies.

Within the Ministry of Health's Centre for Health Security, the Health Security Communications Office (HSCO), created in 2024, operates 24/7 and is dedicated to the supervision and coordination of health emergency communication at national and regional levels. The Health Security Communications Office serves as the focal point to coordinate communications actions with other ministries, national health agencies (the French Agency for Food, Environmental and Occupational Health and Safety, the National Public Health Agency and French National Agency for Medicines and Health Products) and the 18 Regional Health Authorities. In times of crisis, the Health Security Communications Office draws on expertise and staffing from the Information and Communications Delegation (DICOM) of the Ministry of Health, in particular the monitoring and digital departments. The communication system coordinated by the Health Security Communications Office is in place and has been tested in multiple crises during 2024–2025, although full documentation of standard operating procedures is not yet in place. A roadmap for 2025–2026 has been developed which includes increased focus on anticipatory work for risk communication and crisis management, strategy preparation, documentation of procedures, increased focus on dis- and mis-information management and support for the Regional Health Authorities.

The National Public Health Agency has two departments which are the main points of contact for the Health Security Communications Office during a crisis: i) Department of Communication and Public Engagement, responsible for planning the agencies communication strategy and ii) Department for Prevention and Health Promotion, including dedicated teams and support structures that can be quickly mobilised in the event of a health crisis to develop targeted communications strategies. The National Public Health Agency's media strategy is primarily based on year-round educational outreach, with daily interactions and expert briefings with the media. The National Public Health Agency can identify health alerts via their processes and liaise with Health Security Communications Office, or alerts can be generated from the Health Security Communications Office monitoring processes and fed to the National Public Health Agency. Communication between entities is regular and integration of activities was perceived to strengthen risk communication and prevention activities.

A dedicated national risk communication plan is in place which includes media and online and social media. A multi-pronged approach to audience-segmented targeted messaging includes health risk communications to the general public, press, health professionals; use of authorised trained spokespersons; media requisition for wide-scale messaging as well as geo-targeted messaging; rapid activation of toll-free numbers; print and digital campaigns; direct funding/support for help services and associations and direct marketing email campaigns. Target audience analysis is done through media monitoring performed by dedicated teams at the Ministry of Health's Information and Communications Delegation and the National Public Health Agency, including mapping of social media discourse, influence spheres and opinion leaders to guide messaging. This is complimented by social listening systems and data-driven audience insights using data from the following sources, as relevant: epidemiological data trends, knowledge, attitudes, behaviour and practice surveys (i.e. Baromètre de Santé publique France), social and behavioural surveys (i.e. CoviPrev) and public opinion surveys. Campaigns are routinely pre-tested for longer-term public health campaign messages although this is more challenging for rapid response to a crisis.

Both national and regional health agencies engage with community organisations to improve the development and dissemination, co-created, culturally and linguistically-tailored health messages and tools. Increased efforts are underway to expand the use of health mediators, especially with foreign diaspora populations, and to consider sustainable funding for these roles.

Recommendations

- Finalise the planned document '360 communication in crisis situations', focused on the integration of digital expertise and monitoring, while also defining the roles and responsibilities of the main actors involved.
- Strengthen anticipatory work to increase preparedness – e.g. by considering ways to improve monitoring, strengthening focus on mis- and dis-information, increasing support to community engagement, and increasing support to communications work in the regions (Regional Health Authorities), particularly with respect to anticipating and managing crises.

Points of Entry and border health (Capacity 9)

Border health in France, including the designation of points of entry as per Article 20 of the IHR (2005) and the development of core capacities at designated Points of Entry (PoE), as per Annex 1B of the IHR (2005), is governed by the Public Health Code and related regulations. The local contingency plans for public health at PoEs is based on a ministerial document prepared by the Ministry of Health in 2013. Their existence is integrated into broader governmental plans. Communication between national and local levels is outlined in several ministerial orders.

Health events occurring at PoEs are reported through standard channels to regional health authorities. Only critical events are escalated to the national level.

France has 96 PoEs: 60 airports and 36 ports. Of these, 25 (13 airports and 12 ports) are designated PoEs, required to meet the core capacities listed in Annex 1B of the IHR (2005). These designated PoEs handle the majority of passenger traffic and have a higher level of implementation for the required capacities. The Health Crisis Centre monitors the implementation of these capacities. Several designated PoEs are still in the process of developing their public health emergency response plans. It should be noted that France has extended contingency planning requirements to all PoEs to enhance preparedness and response over time.

The public health emergency response plan is integrated into the ORSEC and falls under the responsibility of the departmental Prefect. Coordination and communication mechanisms are established between the Operational Centre for Response and Regulation of Health and Social Emergencies and the Regional Health Authorities.

When public health measures are introduced at PoEs, multiple stakeholders are involved. The National Public Health Agency supports the development of evidence-based messages, the Civil Aviation Authority liaises with airlines, and airports organise on-site information campaigns. Local services under the jurisdiction of the Prefect can also be mobilised. A feedback mechanism is in place to monitor the situation.

During the PHEPA assessment, a representative from the regional health authorities for Île-de-France highlighted regular exchanges with PoEs. A representative from the prefectural office overseeing Paris Charles de Gaulle Airport described a predefined schedule of simulation exercises designed to test various plans, in coordination with the Inter-ministerial Crisis Unit, the Prefect, and other stakeholders. The most recent exercise, simulating a public health emergency, was conducted in July 2024.

In March 2025, the Directorate-General for Health conducted a survey among Regional Health Authorities to assess the status of IHR capacities at their respective PoEs. The results will be used to share best practices and develop action plans across departments.

Recommendations

- Use the findings from the March 2025 survey on PoEs, conducted by the Directorate-General for Health, to identify priorities for capacity strengthening. This should include contingency planning needs for designated PoEs.
- Incorporate the testing of operational tools for reporting travel-related health information into simulation exercises. Ensure these exercises involve multiple PoEs, follow general notification procedures, and include documentation of the process.

Zoonotic diseases and threats of environmental origin, including those due to the climate (Capacity 10)

A cross-sectorial One Health approach to zoonotic diseases and environmental health threats involving the human, animal and environmental sectors is taken. Coordination and collaboration mechanisms are in place at strategic, operational, central and local levels. An Inter-ministerial One Heath Task Force was created in 2023, bringing together the Ministries for Health, Food and Agriculture, Environment, and Research and Innovation with quarterly meetings at strategic level to exchange practices and coordinate policies between sectors. Since November 2023, the Zoonoses Management Coordination Committee has brought together the Directorates-General for Public Health, for Food and Animal Health, and for Water and Biodiversity at the operational level, along with relevant health agencies (the Agency for Food, Environmental and Occupational Health and Security) and the National Public Health Agency on a monthly basis. Each week the Health Security Meeting, led by the Directorate General for Health, brings together the Directorates-General of the Ministries in charge of health and agriculture, the Directorate-General for the Environment, the agencies (Agency for Food, Environmental and Occupational Health and Security, National Public Health Agency, National Agency for Medicines and Health Product Safety), the High Council for Public Health, the French National Authority for Health, and other health security agencies.

France does not have an overarching One Health Strategy but the implementation of a one health approach and cross-sector surveillance on infectious diseases and in other fields (e.g. environmental pollution and chronic diseases), is included in different national plans (Pandemic Plan, National Health and Environment Plan, National Biodiversity Strategy, National Climate Change Adaptation Plan). These plans integrate coordinated action and information sharing between the three sectors, in particular between human and animal health.

A list of priority zoonotic diseases for surveillance, preparedness and response has been established based on human and animal health legislation, expert opinions, and procedures and response plans that are already available. The following zoonotic diseases are considered to be of greatest concern for the future: avian influenza and West Nile virus infection (for the entire national territory), yellow fever and Rift Valley fever (for overseas territories), Crimean-Congo hemorrhagic fever and tick-borne encephalitis virus infection (for mainland France). In addition to surveillance for human health, there are three epidemiological surveillance platforms: for animal health, plant health and the food chain, each based on a consortium of public and private actors. They include all the actors involved in the surveillance of the health hazards concerned. Concrete examples of cross-sectoral surveillance for zoonoses include integrated surveillance of arboviruses, surveillance of leptospirosis, the protocol for active surveillance of avian influenza (SAGA) and the microbiological monitoring system for wastewater (Sum'Eau). A working group for integrated AMR surveillance between the human and animal sectors is being set up by the National Public Health Agency and the Agency for Food, Environmental and Occupational Health and Safety. The new genomic surveillance platform EMERGEN 2.0 aims to capitalise on the lessons learned from the EMERGEN research programme for the sharing of coronavirus sequences by extending it to human and animal influenza viruses and, in future, to sequences of zoonotic viruses, bacteria and parasites.

Multidisciplinary One Health training programmes are organised at university level and for continuous professional development. Various French universities and institutes offer diploma courses that integrate the One Health approach and apply it to different topics, including zoonoses. In recent years, several masters courses have been launched dedicated to the One Health approach. In 2025, the 'One Health Institute' is carrying out a mapping of all training courses incorporating the One Health approach in France. This structure positions itself as a French reference hub for One Health training and since 2024 it has been offering a One Health postgraduate course, designed for public and private decision-makers.

France explicitly considers the present and future effects of climate change on zoonotic diseases in its One Health approach. Since 2005, the French Agency for Food, Environmental and Occupational Health and Safety published a report assessing the risk of emergence and development of animal diseases in view of global warming. Many diseases are examined in terms of their sensitivity to climate change (e.g. diseases related to vectors, molluscs, wildlife, etc.). The Agency also issued recommendations on priority zoonoses: e.g. Rift Valley fever, West Nile fever, visceral leishmaniasis and leptospirosis. To address these risks, several strategic plans have been developed: the National Health and Environment Plan (including an objective specific on the prevention of climate-related zoonoses), the National Climate Change Adaptation Plan (including an axis 'Protecting health against new biological risks'), the Interdepartmental Roadmap on Antibiotic resistance (adding the environmental angle to the medical and veterinary approaches) and the international PREZODE initiative, co-led by France, which funds research and early warning in emerging areas.

Prevention, preparedness and response plans in France include the actual or foreseeable effects of climate change on a range of pathologies and mortality due to extreme weather events. National documents, such as the National Climate Change Adaptation Plan, the National Health and Environment Plan, and the National Health Work Plan, incorporate specific measures to prevent and manage the effects of heat waves, floods, droughts, and forest fires on people's health. In addition, integrated tools such as the Weather Watch, ORSEC and the ORSAN EPI-CLIM plan are available for climate risk management. Meteorological vigilance, carried out by Météo-France, makes it possible to anticipate extreme weather events and to warn local populations and authorities responsible for crisis management.

Recommendations

- Develop a multi-annual national One Health Strategy with clear objectives, targets, coordinated actions, dedicated funding for the respective administrations and dedicated, shared inter-departmental funding. This strategy could be developed by the Inter-ministerial One Health Task Force based on a mapping of the current activities, gap analysis, priority setting and impact assessment.
- Further improve sharing and integration of human-animal-environmental data to achieve common One Health objectives and enhance One Health data analysis, surveillance, modelling, forecasting and risk assessment capacities.

Chemical events (Capacity 11)

French authorities have a series of preparedness and response plans for public health events related to chemical agents. The plans are sector-specific (e.g. health sector, or governmental/inter-ministerial level) and they have both a national and a regional part. The country, including overseas territories, has 11 anti-poison and toxicological monitoring centres and a national network of 45 civil and military chemical analysis laboratories that can be mobilised. The anti-poison and toxicological monitoring centres report to the Agency for Food, Environmental and Occupational Health and Safety for rapid assessment and scientific advice, while the National Public Health Agency performs epidemiological monitoring (e.g. of emergency visits via the SurSaUD surveillance system). A strategy on post-accident epidemiological monitoring and a post-accident biomonitoring programme are being set up by the National Public Health Agency. For the provision of healthcare, the ORSAN plan contains a specific section on chemical events. The ORSAN NRC (chemical, nuclear and radiological) system foresees a reference health institution for chemical-toxic risk (ESRR-CTOX) in each region. For civil protection, the ORSEC plan foresees a principal role for the Prefect of the affected department, when an event goes beyond the municipality level.

The Regional Health Agency supports the Prefect. Institutions such as Ineris and Météo-France provide complementary environmental expertise to government environmental services such as the Regional Directorate of Environment, Planning and Housing (DREAL). Inspections and regular exercises are held for SEVESO-classified installations and site-specific plans. In France, about 700 exercises take place annually, including site-specific, regional and national exercises. French authorities have performed after action reviews and have drawned lessons from past events, such as the mercaptan release from the Lubrizol plant in Rouen or industrial fires (2013, 2019). In line with the all-hazard scope of the Early Warning and Response System (EWRS), the public health authorities refer to the use of EWRS to alert for serious cross-border threats to health.

Recommendations

- Review the interoperability of the preparedness plans for public health events of chemical nature, considering the interaction between the many stakeholders, and address the challenges regarding the appropriate level of data sharing and communication. This includes the procedures, methods and IT-tools or platforms used.

Union level coordination and support functions (Capacity 13)

Coordination between the country and the EU is incorporated into the instruments and procedures related to public health emergency preparedness and response. Interfaces with supranational organisations are directly integrated into French legislation and regulations, either through direct transposition into national law or through the direct application of regulatory texts (European Regulation 2022/2371). France is represented at the various levels of the Health Security Committee (HSC) and the Health Emergency Preparedness and Response Authority (HERA) governance by the Directorate-General for Health. Each representative is responsible for preparing the background documents, bringing positions to the meeting and collecting the information exchanged within their working group to provide feedback to the expert bureaus (at the various relevant levels: national, regional, local). At each level, this responsibility may involve the use of expertise external to the Directorate General for Health, such as that provided by the health agencies.

Since the creation of the Centre for Health Security in March 2024, its organisation has included a new entity 'the Coordination Office (BPP)', responsible for coordinating France's position on health crisis preparedness and management, developed in collaboration with the Health Crisis Centre's Preparedness Division and the Public Health Emergency Operations Centre, and ensuring its representation within the EU and international health security architecture.

The Operational Centre for Response and Regulation of Health and Social Emergencies acts as the national focal point under the IHR. It plays a central role in reporting health events, sharing information in real time and coordinating strategic and operational responses. Health alerts are reported via the Health Alerts and Crises Information System (SISAC) of the Directorate General for Health. All data entered into the SISAC application are made available to each of the users (Regional Health Authorities, Area Regional Health Authorities, Health Crisis Centre, and national health agencies) to summarise and inform their respective partners. Relevant threats are reported to the EU level through the EWRS. To date, there is no automated connection between the Health Alerts and Crises Information System and the EWRS. Reporting to the EWRS is carried out manually by analysts from the Operational Centre for Response and Regulation of Health and Social Emergencies. The Health Alerts and Crises Information System is currently being modernised and should be interoperable with the future HERA platform, ATHINA, by April 2026, in accordance with the EU-HIP (EU interoperability with HERA's IT platform) project agenda. Further interoperability, process automation and additional functionalities of the Health Alerts and Crises Information System are envisaged to improve the usability, notification process and data flows.

European Commission, Health Security Council and ECDC recommendations are considered in national response measures. Examples include the Opinion of the Health Security Committee for a common EU approach in response to the COVID-19 situation in China; the Recommendations for a common EU approach regarding vaccination policies for monkeypox outbreak response; ECDC's Risk Assessment Guidelines for Infectious Diseases transmitted on Aircraft (RAGIDA) guidelines and ECDC's risk assessments on mpox. ECDC Rapid Risk Assessments (RRAs) and

Communicable Disease Threats Reports (CDTRs) are considered essential in the early warning phase, where national data remain limited, and in the anticipation work and day-to-day management of health risks. The daily CDTRs are received by both the National Public Health Agency and the Health Crisis Centre, providing a continuous information base to monitor the evolution of threats, adjust response strategies and ensure effective coordination between national and European actors. In addition, France, via the National Public Health Agency, plays an active role in their development through the regular availability of its surveillance data, the sharing of epidemiological information via the EpiPulse platform in the event of cross-border outbreaks, and methodological and analytical participation in the work of ECDC.

Recommendations

- With an overall aim of surveillance digitalisation and process automation, further develop and modernise the national Health Information System for Alerts and Crises (SISAC) and include additional functionalities to improve the day-to-day notification process, enhance data flows and envisage interoperability of the tool with other alert information systems, including EWRS.

Research development and evaluations to inform and accelerate emergency preparedness (Capacity 14)

The France 2030 strategy clearly prioritises pandemic preparedness and emerging infections in the national research agenda. With dedicated funding for research projects for pandemic preparedness and mechanisms for launching research during health crises, France has structures and processes in place to effectively employ research to support effective response to public health crises. Rapid initiation of studies during health emergencies is facilitated by accelerated approval processes for clinical trials and existing study networks that cover genomics, vaccines, interventional clinical trials and wastewater surveillance. Surveillance open data policies also facilitate the rapid sharing of disease data. The importance of studies in social and behavioural sciences and infodemic management during health crises is also recognised in the strategy of National AIDS Research Agency – Emerging Infectious Diseases, which coordinates research for health emergencies in partnership with the Ministry of Health and the National Public Health Agency.

The National AIDS Research Agency – Emerging Infectious Diseases Emergence Cells facilitate mobilisation of research funding and national coordination of research, as well as sharing of information at four different levels of intensity, congruent with the research needs of an epidemic. Regular information sharing on disease threats occurs between the Centre for Health Security, the National AIDS Research Agency – Emerging Infectious Diseases and the National Public Health Agency. At the National Public Health Agency, collection of case data on emerging infections and outbreak cases is facilitated by reporting mandates. Active engagement of networks with laboratories and hospitals also facilitates the reporting of clinical, epidemiological, and laboratory data useful for understanding disease dynamics. These surveillance data are available at aggregated levels on an open data platform, and researchers can request pseudonymised case-based datasets. With increased resources for research projects aimed at improving response to health emergencies, it will be important to ensure that the findings from these projects are integrated into public health actions, public health messaging, and refinement of surveillance protocols.

While mechanisms are in place for rapid deployment of clinical trials for individual prevention and treatment interventions, mechanisms for rapid deployment of cohort studies that investigate disease dynamics and epidemiological characteristics of an outbreak need formalisation. Such outbreak-related studies can be within the purview of the National Public Health Agency, supported by research partners, as was the case for disease modelling. The hosting of PhD students at the National Public Health Agency can also be leveraged to augment capacity for outbreak-related research during outbreaks that warrant in-depth investigation of epidemiological, clinical, and laboratory characteristics.

Recommendations

- Further develop mechanisms to rapidly deploy prospective cohort studies early in an epidemic to develop insights on clinical disease dynamics, epidemiological-behavioural patterns, and laboratory characteristics that can inform public health prevention and control measures, particularly from the first few hundred cases of an epidemic. Ensure that electronic tools for integrated collection of clinical, epidemiological, and laboratory data from cases can be rapidly adapted to the needs of epidemics of emerging infections.
- The National Public Health Agency, Centre for Health Security and National AIDS Research Agency – Emerging Infectious Diseases should collaborate with reference hospitals, research networks, and laboratories to align goals and processes to ensure efficient coordination for epidemics so that decisions on public health actions can be made with as much evidence possible, as quickly as possible.
- Ensure that investigation and cohort study protocols are anticipated and better integrated to avoid duplication of data collection and to facilitate data sharing between the National Public Health Agency and research teams led by the National AIDS Research Agency – Emerging Infectious Diseases (patient consent aspects and French data protection authority-related approvals).

Recovery elements (Capacity 15)

For large-scale events, formal after-action reviews (AAR) can be implemented at the government or inter-ministerial level, as well as at the level of the Ministry of Health, Regional Health Authorities and their partners, depending on the organisational principles set out in the Prime Minister's circular on the government organisation for major crisis management (2023). At Ministry of Health level, the implementation of after-actions reviews ('RETEX') is a systematic practice following major crises. The introduction of ISO 9001 certification for health institutions (i.e. Centre for Health Security) has made it possible to structure the quality approach and drive actions contributing to the continuous improvement process and post-crisis recovery.

As a steering structure to formalise methodologies, conduct reviews and monitor the progress of the associated action plans, there is a unit in the Centre, dedicated to developing AAR methodology, initiating reviews and collecting feedback, organising and monitoring training and workforce development. The aim is to strengthen the culture of crisis management within health institutions. One principle set out for effective outputs includes dynamic support at managerial level to make the process a priority and raise awareness among health personnel. Feedback from various geographical levels of the health system as well as from intersectoral authorities is requested on a regular basis and should be systematically integrated into planning.

Further efforts need to be directed towards better consolidation of actions regarding recovery plans and application of lessons learned between institutions, including better integration of AAR and performance reviews into public health emergency preparedness and response planning. Structured and regular monitoring and reviews of associated action plans need to be formalised and promoted as best practices.

Recommendations

- Update the SIMEX and AAR guidance.
- Map training needs at regional and local level to inform further directions in capacity building.

Actions taken to improve gaps found in the implementation of prevention, preparedness, and response plans (Capacity 16)

Crisis and major events (e.g. Olympics) have served as a driver for improvements of prevention, preparedness and response planning and crisis management and establishment of the necessary functions and structures to enable timely and coordinated response. Lessons learned have revealed key improvement opportunities, including the need for a shared strategy for risk mapping and planning, more effective alert and crisis response systems, secured supply chains and emergency assets, better mobilisation of trained personnel, regular stakeholder exercises, resilient information and communication systems, and stronger inter-ministerial governance. In 2024, the Centre for Health Security was established as a structure to steer and coordinate actions, covering the full crisis cycle (anticipation, planning, response resources, training, exercises).

The national preparedness and response strategy is based on intersectoral coordination mechanisms and a robust and representative crisis governance. It facilitates information flow among stakeholders, rapid mobilisation of expertise and resources, and dynamic adaptation of plans in response to evolving threats. Corporate agreements have been developed and are now being implemented to ensure cross-sectoral collaboration for building a resilient, and agile health security ecosystem, capable of transforming assessments into concrete, visible and measurable progress. Collaborative frameworks are formalised through service contracts and protocols, supporting a 'whole-of-government' coordinated approach and enabling the mobilisation of expert pools and operational resources during exceptional health situations. Coordination is ensured across institutions, including intersectoral/inter-ministerial, interdisciplinary for health matters, strategic, operational, and at several geographical levels – national, regional and local.

Regular evaluation of plans and crisis mechanisms engages all actors to ensure the credibility, sustainability, and effectiveness of public health responses. Recommendations are translated into measures through strategic roadmaps, regulatory texts, and operational modes of action, with particular attention given to budget issues and multi-year programming of resources. The approach to evaluate IHR capacities is integrated at all response levels.

Given that several strategic components are in place, the window of opportunity should be used to formalise a national action plan for health security, to consolidate these components within a structured and government-endorsed plan to enhance coherence and visibility of key players and strategic directions. Moreover, there is a scope for broader partner engagement: strengthening collective ownership of roadmaps and partnership cooperation, notably with the Regional Health Authorities, to ensure smooth coordination between the central and territorial levels, but also with non-health stakeholders in national governance and through AARs and learning processes. Finally, deployment of steering and performance indicators should be enhanced to accurately measure progress and adjust actions in real time.

Recommendations

- Analyse the reports from SIMEX and AARs conducted to draw lessons learned and improve methodologies and performance indicators.

Conclusions

The country has a solid and comprehensive legislative and regulatory basis to ensure high state of health emergency preparedness and response. There is a culture of testing and exercising, and functional and active collaboration between the key stakeholders to incorporate lessons identified during public health events into revised plans and procedures. The establishment of a specific structure at national level (Centre for Health Security) to support coordination and steer process is a step towards more coherent actions during crisis, based on unified methodologies and performance indicators to review progress and timeliness of actions. There are many good examples on how the key stakeholders collectively prevent, prepare and respond to public health emergency events.

Efforts should continue to preserve knowledge and build competences at all levels of the health system. Strengthening collaboration between key stakeholders should be a continuous effort. Active exchange of knowledge between Regional Health Authorities, healthcare establishments and professional networks needs to be promoted and reports on good practices shared between peers. Primary care providers need to be more actively involved in public health emergency preparedness and response planning as essential service providers and health workforce resource in crisis. Moreover, during the development and implementation of ORSAN plans, challenges and needs should be analysed on a regular basis to support evidence-based decision making.

Annex 1. List of capacities included in the assessment

Table 1A. List of capacities included in the assessment

Capacity no.	Capacity name
Capacity 1.	International Health Regulation (IHR) implementation and coordination
Capacity 2.	Financing
Capacity 3.	Laboratory
Capacity 4.	Surveillance
Capacity 5.	Human resources
Capacity 6.	Health emergency management
Capacity 7.	Health service provision
Capacity 8.	Risk communications and community engagement (RCCE)
Capacity 9.	Points of Entry (PoEs) and border health
Capacity 10.	Zoonotic diseases and threats of environmental origin, including those due to the climate
Capacity 11.	Chemical events
Capacity 12.	Antimicrobial resistance (AMR) and healthcare-associated infections
Capacity 13.	Union level coordination and support functions
Capacity 14.	Research development and evaluations to inform and accelerate emergency preparedness
Capacity 15.	Recovery elements
Capacity 16.	Actions taken to improve gaps found in the implementation of prevention, preparedness and response plans

Annex 2. Practical arrangements for the assessment process

This document describes the main practical arrangements before the assessment process takes place under Article 8 of the SCBTH Regulation. The arrangement refers to the country visit to France that took place from 23 to 27 June at the Ministry of Health and the National Public Health Agency.

The five capacities that were assessed in-depth in this cycle were:

- Capacity 3. Laboratory
- Capacity 4. Surveillance
- Capacity 6. Health Emergency Management
- Capacity 12. Antimicrobial resistance (AMR) and healthcare-associated infections (HAIs)
- Capacity 7*. Health Service Provision

*The fifth capacity was chosen by the country and agreed with ECDC.

Assessment team and national experts

Assessment team

The experts involved in this assessment are detailed in the table below.

Capacities included in the assessment		ECDC Lead experts	Supporting experts
A. International Health Regulation Capacities			
Capacity 1.	IHR implementation and coordination	Jevgenijs Golovcuks	Tanja Schmidt
Capacity 2.	Financing	Svetla Tsolova	Anastasia Pharris
Capacity 3.	Laboratory	Andreas Hoefer	Vivian Leung
Capacity 4.	Surveillance	Anastasia Pharris	Daniele Mipatrini Andreas Hoefer
Capacity 5.	Human resources	Svetla Tsolova	Anastasia Pharris
Capacity 6.	Health emergency management	Emmanuel Robesyn	Svetla Tsolova Damiet Onderstal Tanja Schmidt Daniele Mipatrini
Capacity 7.	Health service provision	Svetla Tsolova	Anastasia Pharris Anne Ingenbleek
Capacity 8.	Risk communications and community engagement (RCCE)	Anastasia Pharris	Tanja Schmidt Anne Ingenbleek
Capacity 9.	Points of Entry (PoEs) and border health	Jevgenijs Golovcuks	Tanja Schmidt Andreas Hoefer
Capacity 10.	Zoonotic diseases and threats of environmental origin, including those due to the climate	Vicky Lefevre	Daniele Mipatrini Anne Ingenbleek
Capacity 11.	Chemical events	Emmanuel Robesyn	Jevgenijs Golovcuks
B. Additional capacities as per the regulation			
Capacity 12.	Antimicrobial resistance (AMR) and healthcare-associated infections (HAIs)	Vivian Leung	Anne Ingenbleek
Capacity 13.	Union level coordination and support functions	Vicky Lefevre	Jevgenijs Golovcuks Aurélie Durand
Capacity 14.	Research development and evaluations to inform and accelerate emergency preparedness	Vivian Leung	
Capacity 15.	Recovery elements	Svetla Tsolova	Anne Ingenbleek
Capacity 16.	Actions taken to improve gaps found in the implementation of prevention, preparedness and response plans	Svetla Tsolova	Anne Ingenbleek

National experts supporting document sharing

Country focal point(s) and experts involved in the document sharing process	
Name	**Organization**
Grégory Emery	Ministry of Health
Caroline Semaille	Ministry of Health
Marie Baville	Ministry of Health
Clément Lazarus	Ministry of Health
Julien Thourot	Ministry of Health
Alexis Pernin	Ministry of Health
Bruno Coignard	Santé publique France
Anne-Catherine Viso	Santé publique France
Loïc Grosse	Santé publique France
Robin Thomas	Ministry of Health
Albane Frambourt	Ministry of Health
Elsa Desal	Ministry of Health
Laurence Srour	Santé publique France
Maëlys Durand	Ministry of Health

National experts participating in the assessment process

National experts participating in the assessment process			
Name	**National institution**	**Role in the assessment (Coordinator, Expert)**	**Main capacity to assess**
Raphaël TARAVELLA	Ministry of Health	Coordinator	C1 - IHR implementation and coordination C9 - Points of Entry (PoEs) and border health
Gabriel FERRAND	Ministry of Health	Expert	C1 - IHR implementation and coordination C13 - Union level coordination and support functions
Mathieu LETARTRE	Ministry of Health	Expert	C1 - IHR implementation and coordination C13 - Union level coordination and support functions
Alexis PERNIN	Ministry of Health	Coordinator	C2 - Financing
Zoé SENTA-LOYS	Ministry of Health	Coordinator	C3 - Laboratory
Harold NOEL	Santé publique France	Expert	C3 - Laboratory
Isabelle PARENT	Santé publique France	Coordinator	C4 - Surveilllance
Coralie GIESE	Ministry of Health	Expert	C4 - Surveilllance
Mathilde WULLSCHLEGER	Ministry of Health	Coordinator	C5 – Human resources
Philippe SEGURA	Santé publique France	Expert	C5 – Human resources
Natapy ATTOUMANI	Ministry of Health	Coordinator	C-6b – Emergency logistics and supply chain management
Christine DEBEURET	Santé publique France	Expert	C6a – Management of health emergency response
Sertac TAS	Ministry of Health	Expert	C6a – Management of health emergency response
Isaure MARION	Ministry of Health	Coordinator	C6a – Management of health emergency response C15 - Recovery elements
André DE CAFARELLI	Santé publique France	Expert	C6a – Management of health emergency response
Caroline BERTRAND	Ministry of Health	Coordinator	C7 – Health service provision
Jean-Marc PHILIPPE	Ministry of Health	Expert	C7 – Health service provision C11 - Chemical events
Julien DEMARIA	Ministry of Health	Coordinator	C8 - Risk communications and community engagement (RCCE)
Sandrine RANDRIAMAMPIANINA	Santé publique France	Expert	C8 - Risk communications and community engagement (RCCE)
Bruno VION	Ministry of Health	Coordinator (on Zoonotic diseases)	C10 - Zoonotic diseases and threats of environmental origin, including those due to the climate
Julien MORIN	Ministry of Health	Expert (on One Health)	C10 - Zoonotic diseases and threats of environmental origin, including those due to the climate
Camille RENOUX	Ministry of Health	Expert (on Threats due to the climate)	C10 - Zoonotic diseases and threats of environmental origin, including those due to the climate
Gisèle BENDJELLOUL	Ministry of Health	Coordinator	C11 - Chemical events
Arnaud MATHIEU	Santé publique France	Expert	C11 - Chemical events
Joëlle CARMES	Ministry of Health	Coordinator	C12a - Antimicrobial resistance (AMR)
Agathe CLAUDE	Ministry of Health	Expert	C12a - Antimicrobial resistance (AMR)
Noémie MERCIER	Ministry of Health	Expert	C12a - Antimicrobial resistance (AMR)
Sarah LE GALL	Ministry of Health	Expert	C12a - Antimicrobial resistance (AMR)
Sophie ALLEAUME	Santé publique France	Coordinator	C12b - Healthcare-associated infections (HAIs)
Elsa DESAL	Ministry of Health	Coordinator	C13 - Union level coordination and support functions
Dahlia DIAB	Ministry of Health	Coordinator	C14 - Research development and evaluations to inform and accelerate emergency preparedness
Bruno COIGNARD	Santé publique France	Expert	C14 - Research development and evaluations to inform and accelerate emergency preparedness
Jérémie CARRE	Ministry of Health	Coordinator	C15 - Recovery elements
Robin THOMAS	Ministry of Health	Coordinator	C16 - Actions taken to improve gaps found in the implementation of prevention, preparedness and response plans

Agenda for the country visit

	Lundi	Mardi	Mercredi	Jeudi	Vendredi
8h30 - 9h	Accueil	Accueil			
9h - 9h30	**Mot d'ouverture** (France, ECDC)	**Capacité (1) & (9) RSI et Points d'entrée**	Accueil		Accueil
9h30 - 10h			**Capacité (3)** in English **Laboratoires**		Debriefing des experts de l'ECDC
10h - 10h30	**Présentation de l'architecture française en sécurité sanitaire**	**Capacité (2) & (5) Financement et Ressources humaines**		Accueil	
10h30 - 11h	Pause	Pause	Pause	**Capacité (13) Coordination de l'UE**	Accueil
11h - 11h30	**Présentation de l'architecture française en sécurité sanitaire**	**Capacité (2) & (5) Financement et Ressources humaines**	**Capacité (10) Zoonoses/OH/CC** / **Capacité (3) Laboratoires** in English		**Mot de clôture Recommandations et prochaines étapes**
11h30 -12h00	**Exercice sur table**	**Capacité (6.a) Gestion de la réponse aux crises sanitaires**		**Capacité (11) Accident chimique**	
12h - 12h30					
12h30 - 13h00		**Capacité (6.a) Gestion de la réponse aux crises sanitaires** / **Capacité (8)** in English **Communication**	Pause déjeuner	**Capacité (15) Rétablissement post-crise**	
13h00 - 13h30				**Capacité 16 Actions PPR**	
13h30 - 14h	Pause déjeuner	Pause déjeuner		Pause déjeuner	Pause déjeuner
14h - 14h30					
14h30 - 15 h	**Capacité (7) Fourniture des services de santé**	**Capacité (6.a) Gestion de la réponse aux crises sanitaires** / **Capacité (14)** in English **Recherche**	**Capacité (12a) RAM** / **Capacité (4)** in English **Surveillance**	Délai supplémentaire	Debriefing sur le processus d'évaluation PHEPA
15h - 15h30					
15h30 - 16h	Pause	Pause	Pause	Debriefing interne des experts de l'ECDC	
16h -17h	**Capacité (7) Fourniture des services de santé**	**Capacité 6.b Logistique approvisionnement**	**Capacité (12b) IAS** / **Capacité (4)** in English **Surveillance**		
17h -17h30					
17h30 -18h			**Bilan J3 (ECDC - France)**		
18h -18h30	z				
18h30 -20h	**Diner Experts - PFNE / Chef(fe)s**		**Réception** *Santé publique France*		

Priority capacity	Break	At the ministry	At the national health agency (SpF)	Plenary sessions	ECDC team meeting	Additional events

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