G7 Shared Understanding on One Health Approach

The COVID-19 pandemic has reaffirmed the need for multisectoral and interdisciplinary collaboration among the human health, animal health, ecosystems including environmental sectors, and others at sub-national, national, regional, and global levels. The importance of strengthening collaboration and building cooperative frameworks under the One Health approach to address shared health security threats has been advocated in various international fora to promote prevention, preparedness and response (PPR) measures, including surveillance, monitoring, early detection and characterization of infectious diseases and other associated health threats; data collection and interoperability; information, data and sample sharing; research; effective response; and cross-sectoral coordination.

At the G7 Health Ministers' Meeting in Nagasaki, Japan on 13 and 14 May 2023, the G7 Health Ministers discussed strengthening PPR for public health emergencies, including pandemics, contributing to achieve more resilient, equitable and sustainable universal health coverage (UHC), and promoting health innovation with the theme of “Working together for a healthier future”. To prevent global infectious diseases from emerging or re-emerging, respond to health emergencies including antimicrobial resistance (AMR) and mitigate the health impacts of global challenges such as the triple planetary crisis of climate change, biodiversity loss and pollution, the G7 Health Ministers acknowledged the need to strengthen efforts and collaboration based on the One Health approach. We also recognize that promoting and implementing such actions during ordinary times will contribute to PPR for future global health emergencies, including pandemics. With that understanding, “G7 High-Level Technical Meeting on One Health” was held virtually on 31 October 2023, with the participation of ministries, competent authorities and agencies in the fields of human and animal health, food safety, agriculture and environment.

We, the G7, welcome the pathways of change approach taken in the One Health Joint Plan of Action (OH JPA) (2022-2026) formulated by the Quadripartite, constituted by FAO, UNEP, WHO and WOAH, showing 3 pathways of change: Pathway 1) Governance, policy, legislation, financing and advocacy; Pathway 2) Organizational and institutional development, implementation and sectoral integration; and Pathway 3) Data, evidence, information systems and knowledge exchange and adapting with 6 action tracks: 1) enhancing One Health capacities to strengthen health systems; 2) reducing the risks from emerging and re-emerging zoonotic epidemics and pandemics; 3) controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases; 4) strengthening the assessment, management and communication of food safety risks; 5) curbing the silent pandemic of AMR; and 6) integrating the Environment into One Health. We recognize the OH JPA as a pertinent conceptual framework and commit to working across ministries, competent authorities and agencies, as well as public and private sectors, civil societies and other key stakeholders, to implement initiatives and projects, aligning with the local circumstances of each country and region, and the international community including the actions being undertaken by G7 members. We will actively share our knowledge and experiences gained from these practices, and link them to global efforts to strengthen the One Health approach. We, the G7, acknowledge the Quadripartite Call to Action for One Health for A Safer World, and will continue to take the recommendations of the One Health High-Level Experts Panel (OHHLEP) into consideration.

The G7 will continue to promote and implement actions inclusively and collaboratively based on the One Health approach to address health security issues, including AMR, emerging and re-emerging zoonotic diseases, the drivers of zoonotic spillover, and the direct and indirect impacts of climate change, that require cross-cutting measures, including through promoting the One Health approach in the ongoing negotiations of a WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response (WHO CA+). Recognizing the crucial events such as the UN General Assembly High-Level Meetings on UHC, pandemic PPR and tuberculosis in 2023 and AMR in 2024, we will strive to further develop ambitious political momentum and concrete commitments to fight these major global health security threats, including seeking to engage in a high-level technical meeting on the One Health approach and supporting the Pandemic Fund that finances PPR projects considering the One Health approach. In addition, we will collaborate and cooperate with various One Health related stakeholders such as those in the fields of human health, and animal (wild and domestic) health, agriculture and environment, not only within the framework of the G7, but also within the G20, countries in the Global South and regional or international organisations including the Quadripartite, and encourage those actions furthermore.

Annex: Examples based on the 6 action tracks of the OH JPA (2022-2026)

* This table shows major examples of the One Health efforts being led by each member of the G7. These are not all of the G7's efforts, and the G7 is committed and will commit to doing more.

Six Action Tracks	Examples of actions
1) Enhancing One Health capacities to strengthen health systems	• Implementing a collaborative One Health approach for pathogen surveillance and enhanced evidence synthesis, knowledge mobilization, data sharing, and science advice around One Health priority areas and with a focus on equity including public communication and support to decision-makers (Canada). • Expand environmental surveillance through existing national collaborative surveillance programs (i.e., wastewater, Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS)) (Canada) • Creation of a multisector and multijurisdictional One Health Working Group, and several Sub-Working Groups (e.g., farmed mink, wildlife, country foods) to address COVID-19 (SARS-CoV-2) at the human-animal interface (Canada) • PREZODE initiative (PReventing ZOonotic Diseases Emergence) (France) • SEGA - One Health Network - epidemiological surveillance and alert management network (France) • ECOnomic development, ECOsystem MOdifications, and emerging infectious diseases Risk Evaluation (ECOMORE) project (France) • CAZCOM Animal and zoonotic disease control project (France) • Creation of a Committee for Monitoring and Anticipating Health Risks (COVARS) to strengthen the One Health approach by addressing emerging One Health risks through its interdisciplinary and multi-sectoral composition (France) • Establishment of specialized laboratories including genomic sequencing, training in surveillance & reporting, supporting one health measures such as controlling dog-mediated human rabies in Namibia - Global Health Protection Programme (GHPP) (Germany) • Establishment of specialised research institutes dedicated to One Health (Institute of International Animal Health/One Health (IITG) at the Friedrich-Loeffler-Institut and the Helmholtz Institute for One Health (HIOH)) (Germany) • A group of AIFA-OPERA experts has been activated to promote optimal uses of antibiotics and combat the onset of resistance (Italy) • Approving the second National Action Plan to fight AMR (PNCAR 2022-2025) with a One Health approach, including the Environmental sector on November 2022 (Italy)

	• Influenza pandemic training through multi-ministerial collaboration (Japan) • The "One Health Collaborative Symposium" held annually, where experts in the medical and veterinary fields share the latest knowledge on zoonotic diseases (Japan) • Annual analysis and publication of combined data from AMRs in each domain, known as the Nippon AMR One Health Report (NAOR), which can be browsed on One Health Platform (Japan) • Close cooperation among relevant ministries regarding avian influenza, including sharing of surveillance results of poultry and wild birds, and establishment of high-level meeting depending on the outbreak situation (Japan) • Tackling Deadly Diseases in Africa Programme 2 (2023 – 2028), will continue building capacity and knowledge of One Health approaches in Uganda, DRC, Kenya, Malawi and Ghana as well as taking a One Health approach across all the programme's components, including our work with important regional actors to ensure that One Health is a key principle of health security initiatives as part of Africa's vision for a new public health order (United Kingdom) • Regular national-level simulation exercises to assess and strengthen the multisectoral, One Health response to non-endemic zoonotic diseases for example rabies, anthrax and 'disease X' (United Kingdom) • UK Health Security Agency IHR strengthening project, working in partnership with National Public Health Institutes, Ministries of Health and regional organisations, to support public health system strengthening and IHR implementation including improved country level One Health governance structures (United Kingdom) • Development of a National One Health Framework and One Health Coordination Unit to coordinate multi-agency collaboration (United States) • Development of a National Biodefense Strategy and Implementation Plan incorporates objectives to counter biological threats to that cover human, animal, plant, and environmental health (United States) • Form and strengthen One Health networks and communities of practice – sub-nationally, nationally, regionally, and globally, including through technical workshops and trainings to support One Health coordination mechanisms and coordinated surveillance and response for zoonotic diseases (United States, Canada) • EU Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach (EU) • Better Training for Safer Food (EU)

	• Strengthened mandates of EMA and ECDC and creation of a One Health inter-agency task force (ECDC, EFSA, EMA, EEA and ECHA) (EU) • EU Global Health Strategy (EU)
2) Reducing the risks from emerging and re-emerging zoonotic epidemics and pandemics	• Mitigation of biological threats in Africa and in the ASEAN regions (Canada) • Conducting risk assessment of diseases with animal-to-human transmission and pandemic potential (Canada) • Developing risk communications for the public to reduce risks from emerging and re-emerging zoonotic diseases including safe practises around interactions with livestock and wild birds, as well as guidance for public health professionals (Canada) • PREZODE initiative (PReventing ZOonotic Diseases Emergence) (France) • SEGA Network (France) • ECOMORE project (France) • CAZCOM project (France) • Launch of the first and largest domestic ducks vaccination campaign using a DIVA- anti-IAHP vaccine (France) • Development of a new surveillance protocol with the objective of earlier active diagnosis of avian flu and dedicated to highly exposed professionals (France) • Funding of a network and a platform to strengthen cross-sectoral research activities and developing solutions for the prevention and control of zoonotic infectious diseases. The Research Platform will be developed further into a Research Platform for One Health (Germany). • Ongoing financial support to the Coalition for Epidemic Preparedness Innovations (CEPI) (Germany) • Participation in a EU research partnership for pandemic preparedness (Germany) • Risk-Assessment e.g., for Avian Influenza or other diseases (Germany) • National Bridging Workshops (e.g., on Rabies) (Germany) • Surveillance and control of zoonotic diseases resulting from climate change (Italy) • Influenza pandemic countermeasure training through multi-ministerial collaboration (Japan) • Supporting for the operationalization of ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED) (Japan) • Collaboration among relevant ministries regarding zoonotic diseases (e.g., surveillance of avian influenza in poultry and wild birds) (Japan) • Early detection of abnormalities by the number of dead birds and animals reported from local governments and national research institutes, utilizing the “Dead Animal Surveillance (DAS) System” (Japan) • Human Animal Infections and Risk Surveillance group identifying and assessing emerging zoonotic infection risks to human health (United Kingdom)

	• Development and publication of the National Contingency Plan for West Nile Virus which will set out a risk-based approach to the threat of WNV in England and advise step-wise responses (United Kingdom) • The UK Zoonoses, Animal Diseases and Infections (UKZADI) Group, an independent committee made up of experts from across the agricultural and public health departments. Advising key stakeholders (including the UK Chief Medical Officer) of trends and observations that impact animal and public health, alongside necessary preventative and remedial action (United Kingdom) • Working across human, animal and environmental health sectors in more than 50 countries to strengthen capacities to detect and address epidemic- and pandemic-prone emerging infectious diseases, including through the U.S. Centers for Disease Control and Prevention's (CDC) One Health Zoonotic Disease Prioritization Process (United States) • Implemented surveillance for SARS-CoV-2 in white-tailed deer and other wildlife (United States, Canada) • Established research funding initiatives on SARS-CoV-2, coronaviruses with zoonotic potential, and other emerging pathogens and collaborated with public health agencies on emerging zoonotic disease One Health responses and by developing tools to rapidly target highly pathogenic Salmonella, molecular characterization of emerging strains (*S. Infantis*), and developing interventions (vaccines, probiotics) (United States) • Conduct surveillance through the National Surveillance for Avian Influenza H5N1 and derivatives in wildlife (United States, Canada) • *OctoFluShow, which* summarizes the genetic diversity of influenza A virus (IAV) in swine submitted to the swine passive surveillance system and makes them publicly available for IAV stakeholders to make informed decisions on vaccine design/use or about the selection of relevant viruses circulating in U.S. swine herds for further characterization (United States) • EU Cross-border Health Threats Regulation 2022/2371 that covers prevention, preparedness, early warning, surveillance and response, including for AMR and healthcare associated infections (EU)
3) Controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases	• Domestic rabies management through surveillance, reporting and response to rabies cases, providing assistance and multijurisdictional coordination, confirmatory and reference laboratory services, supporting vaccine procurement, providing leadership on immunization guidelines and tropical medicine/travel advice/advisories for rabies (Canada) • National West Nile Virus surveillance program that integrates data from humans, sentinel animals and mosquitoes to identify areas of WNV transmission (Canada)

	• Modernize and decentralize testing for emerging/re-emerging and vector-borne diseases (Canada) • PREZODE initiative (Preventing Zoonotic Diseases Emergence) (France) • SEGA Network (France) • ECOMORE project (France) • CAZCOM project (France) • Integration of the Dengue and other Arboviroses in the Preparedness plans (Pandemic Plan, 2024, Olympic Games…) (France) • Mobilisation of the metropolitan civil society against the risks of vector-borne diseases (France) • Promoting NTD research (e.g., on leishmaniasis, schistosomiasis) by funding of specialized German research institute (Bernhard Nocht Institute for Tropical Medicine) (Germany) • Establishing a cross-sectoral whole genome sequencing (WGS) -based surveillance for foodborne pathogens (Germany) • Rabies control in dogs in Namibia – oral bait vaccination study (Germany) • Research on spillover and spillback of occupational zoonotic agents (Germany) • Research on women and children health in livestock breeding societies of LMICs (Germany) • Availability of strategies for low- and middle-income countries to combat local problems with locally available means (Germany) • Influenza pandemic training through multi-ministerial collaboration (Japan) • Accelerating development and delivery of Vaccine, Therapeutics and Diagnostics, targeting major threats to livestock production and zoonotic diseases that can spread to humans (United Kingdom) • Enhanced surveillance schemes for endemic zoonotic infections to better understanding transmission and risk factors for infections to inform public health action and policy (United Kingdom) • National Contingency Plan for Invasive Mosquitos to coordinate domestic actions across government to prepare, detect and respond to the presence of invasive mosquitos in the England (United Kingdom) • Perform emergency response research to determine whether food-producing animal species are susceptible to infection with emerging microbes and whether existing vaccines and countermeasures provide protection, to inform regulatory and public health agencies in their disease response protocols (United States) • Development of One Health technical guidance and resources (including with the Quadripartite) to support coordinated surveillance, response, control and elimination of zoonotic disease threats (United States)

	• Implementation of a North American (Canada, USA, Mexico) Oral Rabies Vaccination program for wildlife and improved toolkits available for the control of mosquitoes and other key vectors of concern (United States) • EU4Health direct grants for human, animal and environmental surveillance (EU) • Audits of Member States and Third Countries in in relation to control of zoonotic diseases such as Rabies, avian influenza based on EU's Animal Health Law (EU) • One Health pandemic pathways series: new series of fact finding visits to MS with mink farms planned in 2024. Aim to identify level of One health approach operationalisation in mink farming and management of possible spillover (EU)
4) Strengthening the assessment, management and communication of food safety risks	• Outbreak detection and risk assessment of enteric illness for Canadians caused by contaminated products or animal exposure (Canada). • Response coordination of multijurisdictional foodborne illness outbreaks through the Foodborne Illness Outbreak Response Protocol (Canada) • Established the Country Foods and One Health Committee to discuss food safety issues related to emerging pathogens in harvested wildlife (Canada) • Interministerial collaboration (Federal Ministry of Food and Agriculture and Federal Ministry of Health) on exchanging sequencing data of food-borne pathogens (Germany) • Use of a systematic One Health approach to early warning and crisis prevention to strengthen the communication about food safety risks (Germany) • Assessment and management of risks for the effect of food on human health regarding AMR bacteria selected by antimicrobial use in food-producing animals (Japan) • Advisory Committee on the Microbiological Safety of Food, providing expert advice to government on questions relating to microbiological issues and food, including the potential for exposure of UK consumers to zoonoses (United Kingdom) • Development of a One Health Data system as part of the Pathogen Surveillance in agriculture, food and the environment (PATH-SAFE) programme to pilot a better national surveillance system for the monitoring and tracking of foodborne disease and antimicrobial resistance (United Kingdom) • AMR R&D projects established as part of the PATH-SAFE programme with an aim to produce comprehensive data on the prevalence, risks, and transmission pathways of AMR at different stages along agri-food chain and the environment (United Kingdom) • The U.S. Department of Agriculture's Salmonella Grand Challenge Project (SGCP) integrates transdisciplinary science to create innovative solutions and new

	approaches to reach the goal of reducing foodborne salmonellosis incidence by 25% (United States) • PulseNet, a national laboratory network, compares the DNA fingerprints of bacteria from patients, food, and the environment to help identify clusters of disease that represent unrecognized outbreaks (United States, Canada) • The National Outbreak Reporting System (NORS), which includes a Foodborne Disease Outbreak Surveillance System and Animal Contact Outbreak Surveillance System, is a web-based platform used by local, state, and territorial health departments in the United States to report all waterborne and foodborne disease outbreaks, certain fungal disease outbreaks, and all enteric disease outbreaks transmitted by contact with environmental sources, infected persons or animals, or unknown modes of transmission to CDC (United States) • Better Training for Safer Food (EU)
5) Curbing the silent pandemic of AMR	• Released the Pan Canadian Action Plan on Antimicrobial Resistance (PCAP), a 5-year blueprint (2023-2027) using the One Health approach to accelerate efforts on combatting AMR (Canada) • Continuous improvement of the Government of Canada's Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS), an integrated surveillance system for AMR and antimicrobial use (AMU) in humans, animals and food with an emphasis on One Health (Canada) • Under the AMR2 program of Canada's Genomics Research and Development Initiative, using genomic tools and a One Health focus to evaluate sources of AMR and the risks of transmission (Canada) • Coordination of the EU Joint action on antimicrobial resistance and healthcare-associated infections (EU-JAMRAI 2) 2024-2028: future joint action aiming at helping countries to reinforce their national action plans, share best practices and build cooperative projects on key aspects of AMR (infection prevention and control, antimicrobial stewardship, surveillance, R&D …) (France) • Participation to the EU AMR One Health network: network with representatives from the 27 member states and the 3 sectors to discuss on the implementation on national actions plans and other relevant actions and levers on AMR (France) • Participation to the EU One Health AMR partnership: future research partnership with a dedicated research agenda aiming at fostering trans-national efforts (research teams + fundings) on AMR (France) • One Health National action plan on AMR with sectoral declinations in Human, Animal and Environmental Health and numerous projects financed at different scales (intersectoral research network, multi-omic database, mobilisation of social and behavioural sciences, research project with LMICs …) (France)

	• Action Plan on AMR as part of the National Strategy against Antibiotic Resistance (Germany) • National Action Plan (German Antimicrobial Resistance Strategy, DART 2030) (Germany) • Participation in the Joint Programming Initiative on Antimicrobial Resistance (JPIAMR) (Germany, Japan) • Research on AMR in food producing animals from divergent production environments, patients, hospital setting and the environment in low-, middle- and/or high-income countries (Germany) • Global Health Protection Programme – AMR components (Germany) • Within the objectives of the national action plan to fight AMR, the relevant Italian scientific societies have produced national guidelines for the diagnosis and the management of infections caused by multidrug-resistant bacteria (Tiseo et al. Int J Antimicrob Agents. 2022 Aug;60(2):106611) (Italy) • Releasing and revising National Action Plan on AMR (2023-2027) and implementing multi-sectoral countermeasures for tackling AMR based on the Plan (Japan) • Annual analysis and publication of combined data from AMRs in each domain, known as the Nippon AMR One Health Report (NAOR), which can be browsed on One Health Platform (Japan) • Genomic analysis to determine the epidemiological relationships between bacterial strains among humans and animals (Japan) • The Asia Pacific One Health Initiative on AMR (ASPIRE) with specific aims including strengthening surveillance systems and laboratory network, health-care management, antimicrobial access and regulation, research and development (Japan) • Strengthening surveillance system for food-borne AMR bacteria based on one health perspectives (Japan) • Early detection of nosocomial infection risk and development of measures to reduce environmental impact by monitoring AMR bacteria in the environment (Japan) • One health AMR bacterial surveillance coordinated with WHO tricycle surveillance (Japan) • Through the Global AMR Innovation Fund, investing in research and product development to address pipeline gaps for vaccines, therapeutics, diagnostics and alternatives to antibiotics in human and veterinary medicine and agricultural and environmental systems, specifically for the benefit of LMICs where the burden of drug resistance is highest (United Kingdom). • The Fleming Fund has just launched its second phase worth up to £210m, which will see a strategic shift towards working across One Health as it partners with countries in Africa and Asia to establish strong AMR

	surveillance systems. Through these systems, the Fund aims to support high quality, robust data, informing local, regional, and national policies and changing clinical practice (United Kingdom) • Expansion of the pilot National Health Service/NICE Antibiotic Reimbursement Pilot as a demonstrable example of a 'pull' incentive to overcome market failures in antibiotic drug development (United Kingdom) • Supported basic and applied research in human health, animal production and protection and sustainable agricultural systems, nutrition, food safety and quality, crop production and protection (including of certain pesticides), natural, and antibiotic compounds in water bodies, to improve the understanding of AMR, its impacts, and practices to reduce the need for antimicrobials and to limit the emergence and spread of AMR (United States) • Strengthened domestic diagnostics, surveillance, and stewardship including through the National Animal Health Laboratory Network (NAHLN), National Animal Health Monitoring System (NAHMS), National Antimicrobial Resistance Monitoring System (NARMS), and the Antimicrobial Resistance Lab Network (United States) • The Presidential Advisory Council on Combating Antibiotic Resistant Bacteria (PACCARB) supports and evaluates U.S. Government activities focused on fighting AMR in human health, animal health, and environmental health using a One Health approach (United States) • Supported partner LMIC countries in the adoption and implementation of One Health AMR national action plans including through effective government supported multisectoral coordination bodies that collaboratively work on issues leveraging the expertise of all sectors. (United States) • New Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach, which complement and extend actions under the 2017 EU One Health Action Plan against AMR (EU) - The Recommendation has as objectives to: ▪ Strengthen One Health National Action Plans on AMR; ▪ Reinforce surveillance and monitoring of antimicrobial resistance and antimicrobial consumption; ▪ Strengthen infection prevention and control; ▪ Strengthen antimicrobial stewardship and prudent use of antimicrobials; ▪ Establish targets for AMR and antimicrobial consumption in human health; ▪ Improve awareness, education and training; ▪ Foster research & development, and incentives for innovation and access to antimicrobials and other AMR medical countermeasures; ▪ Increase cooperation; and

	▪ Enhance global actions. • The revision of the EU Pharmaceutical legislation, EC proposals adopted in April 2023, aiming at providing incentives for the development of new antimicrobials as well as ensuring prudent use and environmental consideration (EU)
6) Integrating the Environment into One Health	• Working towards the integration of surveillance data across the human-animal-environment interface to inform One Health policies and best management practices (Canada) • Integrated environment departments into One Health committees to address urgent issues: Highly Pathogenic Avian Influenza, SARS-CoV-2, Chronic Wasting Disease (Canada) • Applying a One Health framework in efforts to reduce and, wherever possible, eliminate contaminants in traditionally harvested foods through various programs, including the Northern Contaminants Program (Canada) • Joint Research agreement on One Health, since 2022 including the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Germany) • Database on worldwide (measured) environmental concentrations of human and veterinary medicinal products (including antibiotics) in various environmental compartments, which is continuously updated PHARMS-UBA and also IPCheM Portal (Germany) • Integration of information sources on the environment into a systematic One Health approach to early warning and crisis prevention (Germany) • Research programs for arthropode borne (ARBO) viruses: vector analysis, habitat research, invasive species detection, virus screening (Germany) • Wild bird screening programs for pathogens with high zoonotic potential (highly pathogenic H5N1 and West Nile virus) (Germany) • Screening programmes of water as sources for AMR and outbreak prediction (e.g., SOMRAS-WOPPA) (Germany) • Integrated monitoring of determinants of AMR in urban WWTP inlets, and modelling of the release in surface waters of antibiotic molecules, resistant bacteria and antibiotic resistance genes (Italy) • Monitoring & evaluation of soil microbiome to assess soil health as a key component for the One Health approach (Italy) • Collection and accumulation of information on AMR and antimicrobial-resistant bacteria in the environment (water and soil), as part of the National Action Plan on AMR (2023-2027) (Japan) • As part of the PATH-SAFE programme investment in R&D activities which aim to create a scientific and evidence-based understanding of the nature and extent of foodborne disease and AMR in the environment and the

	drivers that influence this, including the development of an environmental AMR IT platform that will enable a scaled-up surveillance programme to be undertaken (United Kingdom) • One Food R&D project. Application of all-hazards and One Health approaches to developing a risk analysis tool to map hazards across all food sectors and calculate the benefits realisation to trade, productivity, animal and human health, biodiversity, climate change and pollution reduction (United Kingdom) • Environmental Public Health Surveillance System operated to identify, acquire, collate and analyse data intelligence and information on environmental hazards, exposures and health outcomes (United Kingdom) • Expanded use of climate data and engagement of climate-based stakeholders, and evaluated the impacts on irrigation and drinking water quality from climate-induced changes to inputs into watersheds (e.g., wildlife, feces, wildfires, wind energy, rising temperatures) (United States) • The One Health Harmful Algal Bloom System (OHHABS) is a surveillance system that collects data on human and animal illnesses and environmental data about harmful algal blooms (United States) • Established a Wildlife Disease Diagnostic Laboratory to support emerging infectious disease detection (United States) • The revision of the EU Pharmaceutical legislation, EC proposals adopted in April 2023, is aiming at a better environmental protection by limiting the emission of pharmaceuticals in the environment (EU) • The European Climate and Health Observatory, launched in 2021, brings together evidence and expertise on the impact of climate change on health and adaptation measures (EU) • EU4Health direct grants for human, animal and environmental surveillance (EU)