

Response from the Royal Society of Biology (RSB) to the House of Commons Environment, Food and Rural Affairs Committee inquiry into animal and plant health

January 2025

The Royal Society of Biology (RSB) is a single unified voice, representing a diverse membership of individuals, learned societies and other organisations¹. Our world-leading biosciences sector contributes strongly to the economy, and to society. We are committed to ensuring that we provide Government and other policymakers, including funders of biological education and research, with a distinct point of access to authoritative, independent, and evidence-based opinion, representative of the widest range of bioscience disciplines.

The RSB welcomes the committee's call for evidence on the matter of animal and plant biosecurity measures for personal and commercial imports to the UK. We are pleased to provide comments informed by our membership of individuals and organisations with expert interests across the biosciences.

Summary

Effective biosecurity measures are essential for the UK to prevent the potentially devastating environmental, economic, security, public and animal health and welfare impacts posed by outbreaks of pests and diseases, including those that are new and emerging, and/or that hold pandemic potential.

It is fundamental that the UK invests strategically in biosecurity, at the international, national and local levels, from border to premises. Important areas for strategic support and investment include:

- appropriate personnel training, standards development (through programmes such as the RSB Professional Registers) and infrastructure for research facilities working on infectious diseases (across the One Health nexus, i.e. in human, animal, fungal and plant populations);
- effective and efficient mechanisms for sharing of research outcomes, surveillance data, population datasets, and for testing and maintaining intervention strategies nationally and internationally;
- effective and efficient prevention, response, control, and healthcare systems (across the One health nexus);
- impactful public information campaigns

A systems thinking approach is critical, which promotes functional coordination and funding distribution across sectors².

Strategically investing in workforce pathways, skills development, and collaborative monitoring and surveillance is critical for effective categorisation and implementation of control measures

To ensure effective enforcement and implementation of its biosecurity controls, Government must invest in appropriate workforce development pathways across the sector, to empower a highly skilled, integrated, interdisciplinary and motivated workforce. This should encompass all areas in the relevant pipeline, from fundamental science and research (e.g. animal, plant and fungal biology and pathology) through to policy

¹ A list of RSB Member Organisations is available on our [website](#)

² The Royal Society of Biology, 2023: [Response from the Royal Society of Biology \(RSB\) to the House of Commons Science and Technology Committee inquiry into emerging diseases and learnings from covid-19](#)

implementation, risk assessment and on-the-ground inspection. Such strategic investment in the necessary workforce should allow cross sector exchange, and career development into specific areas of expertise as appropriate. Important areas for investment in development of expertise include apprenticeship opportunities, promotion of careers across relevant bodies, and implementing a clear pathway of career progression within roles, including continuing professional development and maintenance of standards in involved and related professions^{3 4}. For example, the RSB Biorisk Professional Registration Scheme provides a mechanism for those involved in management, control or containment of biorisk to develop and evidence their professional skills, and provides a benchmark of professional competence for duty-holders⁵. The Plant Health Professional Register provides independent recognition and validation of plant health and biosecurity competencies⁶. Professional awards such as the Registered Scientist programme⁷ can also ensure recognition and validation of skills required by those in relevant roles.

It is critical that biosecurity controls, including at the border, should work alongside effective public information campaigns, which can increase awareness of the risks posed by importing certain materials, and the methods of prevention. Impactful campaigns can successfully encourage members of the public to adopt better personal biosecurity practices, and enable coordination and collaboration across sectors of society to deliver common biosecurity aims with limited resource. Projects like Observatree can also help early detection and monitoring of new pest and diseases to UK plants through public recording and participation⁸.

Appropriate border security and outbreak control measures should be categorised and subsequently operated through a risk based approach, using relevant expertise and up to date, innovative technologies to identify the greatest points of risk⁹. The infrastructure and appropriately trained workforce to manage this requires focused support and funding, with tailored training specific to different areas of biosecurity (e.g. human, plant, fungal, or animal-based risks)¹⁰. This categorisation process should be proactive, rather than reactive, ensuring appropriate controls are put in place prior to import and establishment of new and emerging pests and diseases, thus minimising any potential economic, environmental, and health implications.

Government must take care not to undervalue surveillance despite the difficulty in quantifying the benefits of avoiding negative impacts through surveillance and response activity. Surveillance and health systems should be set up with the appropriate data flows to enable sharing and real time monitoring, insights and responses across disciplines, sectors and national and international borders¹¹. United Nations and related independent frameworks, agreements and structures^{12 13 14} for integrated international collaboration across

³ The Royal Society of Biology, 2023: [Response from the Royal Society of Biology \(RSB\) to the House of Commons Science and Technology Committee inquiry into emerging diseases and learnings from covid-19](#)

⁴ The Royal Society of Biology, 2022: [Response from the Royal Society of Biology \(RSB\) to the call for evidence on the UK's Biological Security Strategy](#)

⁵ [Biorisk Professional Registration Scheme](#)

⁶ [Plant Health Professional Register](#)

⁷ [Registered Scientist professional recognition award](#)

⁸ [Observatree home page](#)

⁹ The Royal Society of Biology, 2022: [Response from the Royal Society of Biology \(RSB\) to the call for evidence on the UK's Biological Security Strategy](#)

¹⁰ The Royal Society of Biology, 2023: [Response from the Royal Society of Biology \(RSB\) to the House of Commons Science and Technology Committee inquiry into emerging diseases and learnings from covid-19](#)

¹¹ The Royal Society of Biology, 2023: [Response from the Royal Society of Biology \(RSB\) to the House of Commons Science and Technology Committee inquiry into emerging diseases and learnings from covid-19](#)

¹² [The UN Sustainable Development Goals](#)

¹³ In 2022 G7 Health Ministers endorsed the [Quadrapartite One Health Joint Action Plan](#)

¹⁴ [The Intergovernmental Panel on Climate Change](#)

these challenges and security domains are important for consolidation of evidence base and collaborative direction setting in national policymaking in this area¹⁵. Such proactive monitoring and international collaboration is imperative to ensure the most appropriate and up to date risk categorisation for organisms or products with the highest and most active level of risk.

¹⁵ The Royal Society of Biology, 2024: [Response from the Royal Society of Biology \(RSB\) to the Environmental Audit Committee enquiry into climate change and security](#)