

# Executive Summary

This Strategy sets out our renewed vision, mission, outcomes and plans to protect the UK and our interests from significant biological risks, no matter how these occur and no matter who or what they affect. It provides the overarching strategic framework for mitigating biological risks within which a number of threat and disease specific UK strategies critically contribute.

**Our vision** is that, by 2030, the UK is resilient to a spectrum of biological threats, and a world leader in responsible innovation, making a positive impact on global health, economic and security outcomes.

**Our mission:** To implement a UK-wide approach to biosecurity which strengthens deterrence and resilience, projects global leadership, and exploits opportunities for UK prosperity and science and technology (S&T) advantage.

## Part One – The Context

Part One describes the strategic drivers and context for the strategy, the nature of the risks we face out to 2030, and the opportunities for UK growth and strategic advantage.

## Part Two – Our Response

Part Two sets out our strategic framework, including how we will organise to deliver the priority outcomes.

The Strategy describes the four pillars of our response to biological risks:

- **Understand** the biological risks we face today and could face in the future.
- **Prevent** biological risks from emerging (where possible) or from threatening the UK and UK interests.
- **Detect**, characterise and report biological risks when they do emerge as early and reliably as possible.
- **Respond** to biological risks that have reached the UK or UK interests to lessen their impact and to enable a rapid return to business as usual.

In addition, three crosscutting enablers run through all four pillars and are drawn out separately:

- **UK Leadership, Governance and Coordination:** formalise central leadership, governance and accountabilities to strengthen collective decision making and preparedness across the UK.

- **UK Science Base, Health and Life Sciences Sectors:** strengthening and protecting our specialist biological security capabilities, and stimulating innovation and growth in the Health and Life Sciences sectors across the UK.
- **International Leadership:** UK engagement to strengthen global health security, pandemic prevention, preparedness and response, international biosafety and biosecurity practices and non proliferation instruments and mechanisms.

This Strategy is accompanied by an implementation plan. A high level summary is provided overleaf.

# High Level Strategy Implementation Plan

A summary of short, medium and longer term commitments.

	Short Term	Medium Term	Long Term
Understand	<ul style="list-style-type: none"> <li>• Scope the development of a Biothreats Radar, assured by experts.</li> <li>• Increase data and intelligence capture on biological threats to the UK.</li> <li>• Facilitate simpler exchange of data across UK government.</li> <li>• Develop a coordinated biological security communications campaign.</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver a UK biothreats R&amp;D package to strengthen the use of advanced analytics, modelling and simulation in decision making.</li> <li>• Deliver a coordinated package of exercises on priority biological security scenarios to improve UK preparedness.</li> <li>• Test a UK-wide biological security communications campaign.</li> <li>• Develop a plant health data system to support outbreak response.</li> </ul>	<ul style="list-style-type: none"> <li>• Implement continuous improvement of the Biothreats Radar, and foresight analytical products.</li> <li>• Project UK standards and protocols, and sustain support for global initiatives promoting safe data use.</li> <li>• Incorporate behavioural science research into biological security communications campaigns to better inform, test and assess their effectiveness.</li> </ul>
Prevent	<ul style="list-style-type: none"> <li>• Establish a new UK Biological Security Leadership Council: a forum to engage strategically with the Life Sciences and Biotechnology sectors, and develop proportionate and pro-innovation approaches to risk management.</li> <li>• Work with our allies and partners to build the case for, and consensus on, proposals to strengthen the Biological and Toxin Weapons Convention (BTWC).</li> <li>• Use findings from the Call for Evidence on antimicrobial resistance (AMR) to inform the next National Action Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Undertake a programme of work to minimise the risks from biodata without stifling innovation.</li> <li>• Introduce new Sanitary and Phytosanitary (SPS) measures at the Border.</li> <li>• Publish the new National Action Plan for AMR (2024 - 2029).</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to promote and develop responsible innovation practices across the UK and internationally.</li> <li>• Promote UK innovation in biosecurity technologies internationally, attract inward investment, and support UK exports.</li> <li>• Regularly assess and update export controls for dual-use biotechnologies, in collaboration with industry.</li> </ul>
Detect	<ul style="list-style-type: none"> <li>• Scope a networked biosurveillance capability across the UK, linked to the International Pathogen Surveillance Network (IPSN), and a strategic approach to diagnostics.</li> <li>• Continue to mature detection technologies for in-field use, and pilot new environmental threat monitoring systems.</li> <li>• Conduct an audit of, and develop plans to strengthen, the UK's leading microbial forensics capabilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Further develop a system-wide approach to UK surveillance capabilities, including developing new nodes or networks towards a pathogen agnostic approach.</li> <li>• Continue to provide assistance with the development of effective pathogen security, biosafety, diagnostics and disease surveillance in partner countries.</li> <li>• Further develop the UK's microbial forensics capability.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to develop biodetection and monitoring capabilities, collaborating with allies and partners.</li> <li>• Implement a new strategic approach to diagnostics, including prototype diagnostics against priority pathogens.</li> <li>• Sustain development of UK microbial forensics capabilities.</li> </ul>
Respond	<ul style="list-style-type: none"> <li>• Lead efforts to implement the 100 Days Mission, including support to the International Pandemic Preparedness Secretariat.</li> <li>• Publish generic invasive non-native species contingency plans that cover terrestrial, freshwater and marine environments.</li> <li>• Develop a roadmap towards comprehensive response plans against a spectrum of biological threats.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a new strategic approach to pandemic preparedness across government.</li> <li>• Participate in negotiations towards a legally binding instrument on pandemic prevention, preparedness and response with international partners.</li> <li>• Develop an updated capability to effectively remediate a scene contaminated with biological threat material.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and evaluate prototype vaccines, therapeutics and diagnostics for priority pathogens of pandemic potential.</li> <li>• Continue to strengthen the UK's vaccine capability, capacity and resilience, including the supply chain.</li> <li>• Implement, with international partners, a legally binding instrument for pandemic preparedness.</li> </ul>
Crosscutting	<ul style="list-style-type: none"> <li>• Implement formalised leadership and governance structures for oversight of biological security. Establish a dedicated coordination unit in the Cabinet Office.</li> <li>• Periodically review capability health and take action to address identified gaps.</li> <li>• Stimulate innovation and growth via a pipeline of biological security S&amp;T Missions.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a roadmap for UK specialist biological security S&amp;T infrastructure, capability and skills.</li> <li>• Scope a new, agile procurement mechanism for commissioning S&amp;T from UK academia and industry, using simplified processes to stimulate innovation.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to play a leading role in international fora to strengthen pandemic preparedness and response.</li> <li>• Implement the roadmap to develop specialist biological security S&amp;T infrastructure (including high containment laboratories), capability and skills across the UK.</li> <li>• Conduct a stocktake of the Strategy implementation plan to inform future iterations of the Strategy.</li> </ul>