

## **Written evidence**

### **Joint Committee on the National Security Strategy: UK Biological Security Strategy**

Submission by Dr Roderick Bailey and Dr Stephanie Johnson, Research Fellows at the University of Oxford's Wellcome Centre for Ethics and Humanities. Their work focuses on issues arising from global challenges of infectious disease, particularly concerning surveillance, outbreak investigation and ethical considerations required to ensure sustainable and successful interventions.

#### **Summary**

This submission highlights the importance of ethical, social and political dimensions to the challenges and opportunities outlined in the UK Biological Security Strategy (2018).

Specifically, it aims to enhance understanding of the following three areas of acknowledged importance: international partnerships; public trust; and private sector involvement.

#### **International partnerships**

1. The Biological Security Strategy (2018) rightly highlights the importance of supporting health systems and surveillance and response capabilities within countries most affected by, and vulnerable to, biological threats.
2. Although global health is increasingly articulated in ways that emphasise security, the securitization of health can promote the conceptualisation of disease outbreaks as external threats rather than shared problems within the global community. It is vital to acknowledge the interdependence of countries when it comes to understanding these threats and formulating responses.
3. Effective strategies of international collaboration are essential to effective responses but require the compliance of affected countries. If the full benefits to biosecurity are to be realized, pragmatism and principles of reciprocity suggest that the rights and concerns of global partners must be considered and addressed. The burden placed on some states can be high and compliance may be costly.
4. Indonesia's response to the Avian flu epidemic underlines the importance to effective responses of justice, transparency, and international collaboration.

***Adapted from Sedyaningsih, E. R. 'Towards mutual trust, transparency and equity in virus sharing mechanism: the avian influenza case of Indonesia' (2008)(1)***

*In 2003, highly pathogenic 'avian flu' was detected amongst poultry in Indonesia, where the largest number of human cases would subsequently develop, resulting in fears of a pandemic.*

*In 2007, after learning that an Australian pharmaceutical company had developed a vaccine based on an Indonesian strain without the country's knowledge or consent, Indonesia ceased to share virus samples with the Global Influenza Surveillance Network, a multinational partnership in which participating countries pool samples for the purposes of research and monitoring. Indonesia complained that methods of vaccine production and distribution were neither equitable nor transparent, and that most people who received vaccinations resided in high income countries while lower income countries carried the highest disease burden. Indonesia eventually agreed to resume sharing after the WHO promised to ensure that vaccine production and access would proceed on a fairer basis.*

*Similar problems continue to undermine global responses to infectious disease. The 2014 Nagoya Protocol on Access to Genetic Resources, for example, was developed to facilitate access to genetic resources and the fair and equitable sharing of benefits arising from their utilization, but uncertainties about intellectual property rights, as well as stakeholder reluctance to share assets, continue to hamper access to samples and the benefits of research(2).*

**International partnerships: Recommendations**

5. Effective strategies of biosecurity must aim to align the interests of different parties and promote trust with international partners. Collaboration between global stakeholders can maintain international dialogue, achieve consensus and ensure the productive and equitable sharing of data, funds, experience, benefits, and best practice.
6. Successful 'capacity building' requires more support than supplying vaccines or assistance with burying the dead. Strategies must seek to identify and respond to health priorities identified by countries themselves. This can include, for example, a sustainable healthcare infrastructure and research capacity, including equipment, training and academic recognition.

**Public Trust**

7. By raising awareness of challenges and risks, early and meaningful community engagement can increase public trust in proposed interventions and reduce harm and exploitation of vulnerable individuals and communities.
8. Gaining and maintaining public trust can be hard to achieve. Outbreaks spread fear and can promote friction, suspicion, mythmaking, and scapegoating, and it may be difficult

to ensure accurate and adequate understanding. The anti-vaccination movement is one example of how a failure to gain public trust can impact adversely on containment.

9. The implications of public mistrust are very evident to aid organisations currently attempting to combat Ebola virus in West Africa.

The Ebola outbreak in the Democratic Republic of Congo (2018 on.) has confronted foreign governments and aid agencies with serious obstacles to its effective prevention and control. Although improvements have been made since 2014 in vaccine development and methods of treatment and care, the major problem of securing the cooperation of communities and individuals remains.

Aid workers of *Médicins sans Frontières* report significant challenges. These range from widespread refusals to cooperate in prevention activities, including vaccination programmes, to violent attacks on treatment points. Suspicion of outsiders' motives is a particular problem. Relatedly, resistance to vaccination is notably significant in regions where security forces accompany Ebola treatment teams.

Informed by social scientists, *MSF* measures effective at promoting acceptance of international interventions include working through trusted community members and efforts to actively improve the general health of communities by, for example, addressing diseases like malaria, cholera and typhoid as well as the Ebola virus.

Greater trust means greater cooperation, willing patients presenting earlier, and improved prognoses. But achieving it can be extremely difficult. As one *MSF* worker has written, 'Epidemics thrive on fear – when they are frightened, patients flee hospitals, sick people stay away to begin with, and affected communities distrust groups trying to respond'(3).

### **Public Trust: Recommendations**

10. Efforts to respond to biosecurity threats are badly vulnerable to mistrust among communities in affected regions. Communication methods that enhance public understanding of risks and responses are needed. This should include consideration of the nature and implications of new technologies and the collection, storage and use of healthcare data.
11. Meaningful engagement with local communities is crucial to developing methods of successfully winning trust and cooperation. This can include outreach activities that address real and perceived injustices and worries that relate indirectly, or not at all, to the identified threat. Sensitivity to underlying and additional problems that face these communities can be essential to success.

## The role of the private sector

12. The benefits of private sector involvement in biological security strategies include the funding of scientific research and development, the production of therapeutic interventions, and effective and efficient implementations at scale.
13. The dangers include unfair distribution of resources, inequitable sharing of benefits and the potential for serious conflicts of interest around the creation of new resources and knowledge.
14. Iceland's experience of implementing a major health database highlights the importance of transparency, public debate and strong oversight to ensure public support for private sector involvement.

***Adapted from David E. Winickoff, 'Genome and Nation: Iceland's Health Sector Database and its Legacy' (2006) (4):***

*In 1998, Iceland introduced a law authorising the development of a health sector database holding the genetic and medical information of its entire population. The most controversial provision authorized the transfer of all medical record data to a private biotechnology corporation with rights to exploit that data as a commercial commodity. By invoking a rule of 'presumed consent', this commercial development would not require the express consent of individuals. Icelanders were given six months to opt out unconditionally.*

*Civil society and professional networks, including the Icelandic Medical Association, objected strongly to the legislation, claiming that it failed to protect the rights of research subjects and that the commercial license was monopolistic. Significant numbers of Icelanders opted out of the database.*

*Ultimately, the database did not materialise. The legislation had failed to satisfy an emerging consensus about norms governing genomic research and the collection and storage of health, genealogical, and genetic data.*

## The role of the private sector: Recommendations

15. Effective guidelines for partnerships between public and private institutions, addressing issues such as ownership of data and equity, are conducive to well-founded public trust and confidence.
16. The public should be consulted from an early stage on the acceptability and proposed conditions for public-private partnerships.

## References

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3. Nguyen V-K. An Epidemic of Suspicion — Ebola and Violence in the DRC. *New England Journal of Medicine*. 2019;380(14):1299.
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