

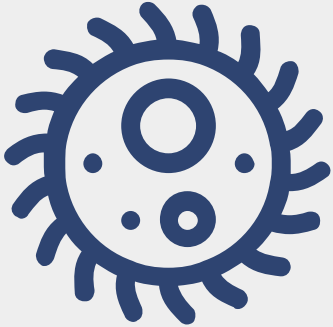
New Regulations in Private Biolabs

Biosecurity for Laboratory-Originated Pathogens

Evelyn Teng | Non-Trivial Fellowship Jul '24

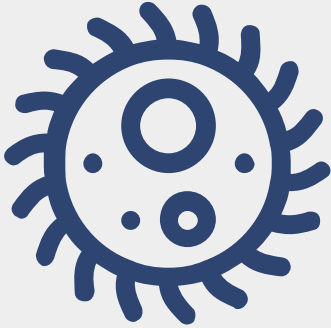
Problem Significance

Problem Significance



Human
transmissible
H5N1: US Lab

Problem Significance

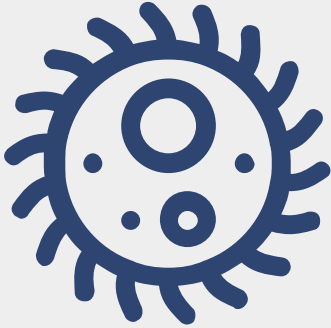


Human
transmissible
H5N1: US Lab



Foot-and-Mouth
Disease: UK
Farms

Problem Significance



Human
transmissible
H5N1: US Lab



Foot-and-Mouth
Disease: UK
Farms



Improper
management: US
Lab

Problem Significance



Private Labs

Problem Significance



Private Labs



Faulty
Equipment and
Negligence

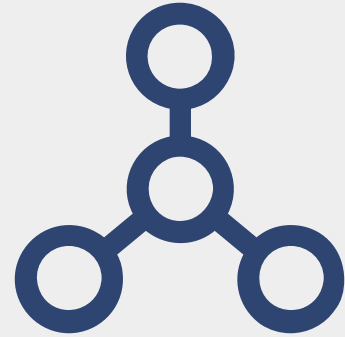
Problem Significance



Private Labs



Faulty
Equipment and
Negligence



Regulation
Patchwork

Proposal

Proposal



Mandatory **registration** of all private labs

Proposal



Mandatory **registration** of all private labs



Reporting of all pathogen acquisitions

Proposal



Mandatory **registration** of all private labs



Reporting of all pathogen acquisitions



Inspection to ensure equipment matches requirements



Mandatory **registration** of all private labs



Reporting of all pathogen acquisitions



Inspection to ensure equipment matches requirements

PILOT PROGRAM



Announcement

Registration
(1 year long)

Inspection

Policy Review

Development

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Research and draft detailed protocol								
Conduct meetings with stakeholders								
Stakeholder review and feedback								
Develop database and user interface								
Finalise protocols								
Roll out policies on pilot program labs								
Evaluate pilot results								
Review and refine protocols and processes								

**“Compared to an
estimated \$1 trillion
plus cost, funding in
biosecurity efforts are
worthwhile, both in
theory and in practice”**

– Biodefense Research Two Decades Later: Worth the Investment? (2023)

Goals

Goals



Build on current measures

Goals



Build on current measures



International **collaboration**

Goals



Build on current measures



International **collaboration**



Greatest **impact**, least resistance

Goals



Build on current measures



International **collaboration**



Greatest **impact**, least resistance



Cost-effective and **scalable**