G8 Global Partnership against Weapons and Materials of Mass Destruction (WMD)

- Established in 2002 (Canada, G8 Summit):
  - “Commitment to preventing terrorists, and States of proliferation concern, from acquiring or developing nuclear, chemical, radiological and biological weapons, missiles and related materials, equipment, and technology”.

- GP committed ~ $20 billion over 10 years

- Initial priority – Russia/Former Soviet Union Cold War WMD legacy (but now global)
Why does the UK have an International Biosecurity Programme (IBSP)?

Overseas biological security concerns:

– Lack of biosecurity/biosafety/diagnostics/surveillance
– “Dual-use” science/scientists - potential for radicalisation/coercion
– Lack of non-proliferation awareness/naivety and transparency
– Lack of ethical awareness
– Projection of soft power & influence through cooperative biological threat reduction activities
– Reduce drivers of conflict
– *Aim: to prevent hostile acquisition/use of human, animal and plant pathogens*
Where does the IBSP operate?

- At the ‘dual-benefit’ health/security intersection; IBSP focuses on overseas biological security engagement; infectious disease surveillance, detection/diagnostics, outbreak response/control, biosafety/biosecurity.
Why does the security sector engage with the animal (and plant) health sectors?

– Prevention of illegal access to pathogens (for criminal or terrorist purposes):
  • Animal diseases have significant potential to cause economic damage (e.g. FMDv, ASFv)
  • High number of human diseases are of animal origin/zoonotic (i.e. also a threat to human health)
– Efficient surveillance to determine outbreak provenance
– Rapid outbreak response and attribution
– ‘One-health’ approach increases efficiency/effectiveness
– Lack of food security can be a significant driver of civil unrest and conflict
Working with OIE and UN FAO

• Access to networks, programmes and field offices
• Joint disease eradication programmes (RPv and PPRv)
• OIE:
  – Twinning programmes for laboratories, veterinary legislation and education.
  – Performance of Veterinary Services (PVS) assessments
  – Focused workshops (with outcomes and recommendations)
  – Activities focused on compliance with internationally agreed standards
• FAO:
  – Veterinary infrastructure capacity building
  – Outbreak response/control through AH-Crisis Management Centre
  – Plant pathogen biosecurity, diagnostics and surveillance
CANUKUS funded renovation of regional training facility in Jordan
UK IBSP animal health project with academia (1)

- **3-year OIE Veterinary Education Twinning Project:**
  - UK Royal Veterinary College (RVC) and Jordan University of Science and Technology (JUST)
  - First veterinary twinning project in the Middle East/North Africa (MENA) region
  - Joint funded with US (DTRA)

- **Security/threat reduction justifications**
  - Influence next generation veterinarians; promotion of best-practice
  - Resilience/sustainability – delivered in collaboration with local experts
  - Longer-term strengthening of regional animal health services (e.g. surveillance/diagnostics; outbreak response/control)
  - Leverage of JUST’s regional reputation and outreach
**UK IBSP animal health project with academia (2)**

- **Main activities:**
  - Development of curricula
  - Joint research projects/student exchanges
  - Promotion of international best-practice and ethics
  - Regular exchange visits
  - Focused workshop activities (e.g. equine medicine)
  - General RVC consultancy (e.g. on training for wildlife vets)

- **Desired outcomes:**
  - EAEVE* accreditation
  - Improved standards of veterinary services across MENA
  - Closer links with European/US veterinary communities

*European Association of Establishments for Veterinary Education (EAEVE)*
Future options for support from academia:

- **Training courses** (e.g. biosafety, biosecurity, diagnostics, surveillance, response)
- **Research-based projects with overseas partners** (disease surveillance, diagnostics, genomics etc)
- **Promotion** of the “One-Health” agenda
- **Collaborations with** Intergovernmental Organisations (e.g. through FAO, OIE twinning programmes).
- **Innovation/exploitation of niches** (e.g. low-resource biosafety)
- **Multi-disciplinary academic publications** to support security sector programmes (e.g. on forward-looking biological threat reduction; conflict reduction)
Training example; IBSP in Azerbaijan

• Support to US DTRA programme – 11 BSL-2 diagnostic labs
• A number of UK-funded activities including:
  – BSL-2 basic biosafety training (Public Health England)
  – Basic molecular techniques (Animal and Plant Health Agency)
  – Advanced vet diagnostics Train-the-Trainer courses (APHA)
  – Bespoke diagnostics workshops:
    • *Brucella*
    • Rabies
• Outcome - Lab staff throughout country now trained in basic biosafety/ and modern veterinary diagnostics
• Sustainability remains an issue