

VERIFICATION RESEARCH, TRAINING AND INFORMATION CENTRE

Development House, 56–64 Leonard Street
London EC2A 4LT, United Kingdom

Tel +44 (0)20 7065 0880
Fax +44 (0)20 7065 0890
Website www.vertic.org

BIOLOGICAL WEAPONS CONVENTION: MEETING OF EXPERTS 16-20 JULY UNOG, GENEVA, SWITZERLAND

NATIONAL IMPLEMENTATION OF THE BWC: A CASE STUDY

Scenario –

US and Dutch scientists have succeeded in making avian influenza (H5N1) transmissible between mammals via aerosol. This is a significant development that highlights the potential for this highly deadly virus to evolve and be transmitted between humans via the airborne route.

In the past year, there has been debate about whether these findings should be published. The findings could help public health officials and scientists develop medical countermeasures to save lives, but could also directly or indirectly facilitate the weaponisation of H5N1, or the development of other biological weapons.

The findings have been recently published and scientists around the world would now like to work with these new strains of H5N1.

What elements of national legislation will states find helpful in implementing the BWC, using this scenario as a case study?

1. Definitions

1.1 Why is it important to define what a biological weapon is? Could the H5N1 strains be used as a biological weapon?

- National legislation should define the concept of ‘biological weapon’ to help with the interpretation of any provision referring to biological weapons, especially criminal provisions.
- If ‘biological weapon’ is defined in accordance with Article I of the BWC, H5N1 could be considered a biological weapon only if used, developed, produced, stockpiled or otherwise acquired or retained in quantities that have no justification for prophylactic, protective or other peaceful purposes.

2. Criminal Provisions

2.1 What happens if states do not criminalize the development, production, possession, acquisition, transfer, transport or use of a biological weapon involving the H5N1 virus?

- If states do not criminalize the development, production, possession, acquisition, transport, transfer or use of biological weapons they will not be able to effectively prosecute individuals breaching the general prohibition against biological weapons.
- Additionally, states can criminalize the intentional use of biological agents such as H5N1 to harm people, animals and plants with a political, social or economic purpose - acts of bioterrorism.



2.2 Can other provisions in criminal legislation be used to prosecute the use of H5N1 as a weapon?

- Any use of the new strains of the H5N1 virus as a weapon could fall under the umbrella of other common crimes. Depending on the result, a prosecutor could try to prosecute the crime as a ‘murder’ or ‘infliction of injury’, but penalties associated with the infliction of injury may be less severe and these crimes do not contemplate the nature of the means used to perpetrate the crime. Some penal codes criminalize the intentional spreading of disease but they are usually old provisions with inadequate penalties. Effective criminal provisions which are specific to biological weapons should also include preparatory acts, which are not generally covered under existing criminal legislation.

3. Alternative criminal liability

3.1 What is alternative criminal responsibility and does it need to be criminalized?

- Alternative criminal responsibility applies to other actors that have been involved in the commission of the crime such as instigators, accomplices or assistants. For example, if a state does not criminalize the financing of the acquisition of a biological agent, toxin or virus for biological weapons purposes, whether by a criminal organization or an individual, they may not be able to prosecute, or effectively prosecute, some of the actors or entities that have been essential for the perpetration of the crime.

4. Jurisdiction

4.1 What kind of jurisdiction is needed to prosecute crimes connected with the new strains of H5N1?

- *Territorial jurisdiction* will be enough to prosecute crimes perpetrated wholly within a state’s territory.
- However, criminal or terrorist organizations or rogue individuals may seek to perpetrate criminal activities connected to the use of the new strains of the H5N1 transnationally; therefore states should consider establishing *extra-territorial jurisdiction* to prosecute all actors and activities connected with the main crime whether they took place within the state or not.
 - Elements of the criminal activity, such as financing to acquire the virus, may be carried out abroad.
 - The perpetrator of a crime related to H5N1 may be a national acting in a foreign state.
 - The victim of an attack with a weapon involving H5N1 may be a national in a foreign state.

5. Transfer controls

5.1 What if H5N1 is not included in a state’s transfer control list? Can the state still control the transfer?

- If H5N1 is not included in a state’s existing transfer control lists, a state may want to consider amending its control lists to include types and subtypes of the avian influenza virus.
- Some states already have a ‘catch-all’ clause in their transfer controls legislation; such clauses are very helpful, as they enable a state to control transfers of unlisted viruses (and other biological agents and toxins) if it considers that the new virus strains could be a threat to public safety and security.

5.2 Scientists have expressed interest in acquiring samples of the new H5N1 strains for research for prophylactic purposes. How can a state control any transfers of the new strains?

- Some transfer control measures are needed to ensure that the new strains are used for peaceful or prophylactic purposes:
 - If the scientists wish to *import* samples they should be required by law to request an import permit.
 - If scientists wish to *export* samples they should be required by law to request an export permit and present an end-user certificate ensuring that the exported samples of the new H5N1 strains will only be used for prophylactic, protective or other peaceful purposes.
 - Other activities such as re-export, transit and transhipment should also be authorised in accordance with legislation.

5.3 Scientists might wish to acquire knowledge of how to develop the new H5N1 strains. How can states control the transfer of the know-how?

- States may consider including in their transfer controls legislation a provision controlling '*intangible transfers*', which would include the transfer of knowledge, for example research sent via email. Scientists wishing to export/import the know-how to develop the new H5N1 strains would be then required by law to apply for an export/import permit.

6. Biosafety/biosecurity measures

6.1 Why would a state need to authorise the use, development, possession and transport of the new H5N1 strains?

- The new strains of H5N1 are highly deadly and contagious. A state should authorize laboratories seeking to undertake research with the virus and ensure that they can account for and secure the quantities they handle, and effectively confirm that their research remains for prophylactic, protective or other peaceful purposes.

6.2 If authorised laboratories within a state's jurisdiction would like to work with the new H5N1 strains, what biosafety and biosecurity measures should they have in place?

- Appropriate and effective biosafety and biosecurity training for laboratory personnel handling such materials.
- Precautions to prevent the accidental release of an aerosol-transmissible H5N1 virus (or other biological agents or toxins) and to mitigate the risk of its deliberate diversion.
- Risk assessment and risk mitigation plans should be in place – this could include mechanisms to notify theft or loss or other diversion of samples.
- Facilities should have physical protection measures in place such as fences, locks, access codes, cameras, guards, etc.
- When transporting samples security should also be ensured – through authorized transporters, package tracking, the monitoring of routes, etc.
- Measures to regulate the funding and publication of research of dual-use concern to minimize the risk of biological weapons proliferation.

7. Enforcement

7.1 How can a state be certain that laboratories working with the new H5N1 strains are only pursuing prophylactic, protective or other peaceful purposes?

- A state might wish to provide for inspections of facilities which have been authorized to work with the new strains of H5N1. These inspections could verify that the terms of their license are being complied with, and check that accountability and security measures are being implemented and followed.

7.2 What measures are needed to effectively investigate and prosecute any crimes related to the use of H5N1 as a weapon?

- States may wish to consider whether their existing criminal procedural measures are adequate and effective in enabling them to:
 - Gather intelligence (e.g. interception of communications).
 - Investigate biological weapons crimes with properly trained law enforcement and public health officials.
 - Enter premises to gather evidence and ensure chain of custody.
 - Co-operate in criminal and judicial matters with other countries that have also been affected by any illicit activities involving the strains.

7.3 How can states respond to an outbreak arising from an H5N1 strain?

- An effective co-ordinated response mechanism for the accidental or intentional spread of H5N1 (or any other deadly biological agent or toxin for that matter) is key to ensuring the containment of any disease outbreak and for investigating the source of an outbreak. A national system can be mandated through legislation, which can also coordinate with any other national or international agencies which offer assistance.

CONVENTION SUR L'INTERDICTION DES ARMES BIOLOGIQUES: RÉUNION D'EXPERTS 16-20 JUILLET - ONU, GENEVE, SUISSE

MISE EN ŒUVRE NATIONALE DE LA CIAB: UN CAS PRATIQUE

Scénario -

Des scientifiques américains et néerlandais ont réussi à faire de la grippe aviaire (H5N1) transmissible entre les mammifères via des aérosols. Il s'agit d'une évolution importante qui met en évidence le potentiel de que ce virus hautement mortel puisse évoluer et être transmis entre les humains par voie aérienne.

Dans l'année écoulée, il a été question de savoir si ces conclusions devraient être publiées. Les résultats pourraient aider les responsables de santé publique et les scientifiques à développer des contre-mesures médicales pour sauver des vies, mais pourraient également directement ou indirectement faciliter la militarisation de l'H5N1, ou le développement d'autres armes biologiques.

Les résultats ont été publiés récemment et scientifiques du monde entier voudraient maintenant travailler avec ces nouvelles souches du virus H5N1.

Quels sont les éléments de la législation nationale que les États peuvent trouver utile pour la mise en œuvre de la CIAB, en utilisant ce scénario comme un cas pratique?

1. Définitions

1.1 Pourquoi est-il important de définir ce qu'est une arme biologique? Est-ce que les nouvelles souches du H5N1 peuvent être utilisées comme une arme biologique?

2. Dispositions pénales

2.1 Qu'est-ce qui se passe si les États ne criminalisent pas le développement, la production, la possession, l'acquisition, le transfert, le transport ou l'utilisation d'une arme biologique contenant le virus H5N1?

2.2 Est-ce que d'autres dispositions dans la législation pénale peuvent être utilisées pour faire la poursuite de l'utilisation du virus H5N1 comme une arme biologique?

3. Responsabilité pénale accessoire

3.1 Qu'est-ce que c'est la responsabilité pénale accessoire? Est-ce qu'elle doit être criminalisée?

4. Juridiction

4.1 Quelle juridiction doit être établie pour poursuivre des crimes liés aux nouvelles souches de virus H5N1?

5. Contrôles des transferts

5.1 Que faire si le virus H5N1 n'est pas inclus dans la liste des matériaux contrôlés? Est-ce que l'État peut toujours contrôler le transfert?

5.2 Les scientifiques ont exprimé leur intérêt pour acquérir des échantillons des nouvelles souches H5N1 pour faire des recherches à des fins prophylactiques. Comment est-ce qu'un État peut-il contrôler tous les transferts des nouvelles souches?

5.3 Les scientifiques souhaitent acquérir les connaissances nécessaires pour développer les nouvelles souches du H5N1. Comment les États peuvent-ils contrôler le transfert du savoir-faire?

6. Mesures de biosécurité/ biosûreté

6.1 Pourquoi les États doivent-ils autoriser l'utilisation, le développement, la possession et le transport des nouvelles souches H5N1?

6.2 Quelles mesures de biosécurité et biosûreté devraient être mises en place pour que les laboratoires autorisés puissent travailler avec les nouvelles souches H5N1?

7. Mise en œuvre

7.1 Comment est-ce qu'un État peut être certain que les laboratoires qui travaillent avec les nouvelles souches H5N1 poursuivent des recherches prophylactiques, de protection ou à d'autres fins pacifiques?

7.2 Quelles mesures sont nécessaires pour enquêter efficacement et poursuivre en justice les crimes liés à l'utilisation du virus H5N1 comme une arme biologique?

7.3 Comment les États peuvent-ils réagir à une éclosion résultant d'une souche H5N1?

**CONVENCIÓN SOBRE LAS ARMAS BIOLÓGICAS:
REUNIÓN DE EXPERTOS 16-20 DE JULIO - ONU, GINEBRA, SUIZA**

APLICACIÓN NACIONAL DE LA CAB: CASO PRÁCTICO

Escenario –

Científicos estadounidenses y holandeses han logrado hacer que la gripe aviar (H5N1) sea transmisible entre mamíferos a través de aerosoles. Este es un desarrollo significativo ya que pone de relieve la posibilidad de que este virus altamente mortal pueda evolucionar y ser transmitido entre los seres humanos por vía aérea.

En el último año, se ha debatido acerca de si estos resultados debían ser publicados. Los hallazgos podrían ayudar a funcionarios de salud pública y científicos a desarrollar medidas que salven vidas, pero también pueden directa o indirectamente, facilitar la militarización de la cepa H5N1, o el desarrollo de otras armas biológicas.

Los hallazgos han sido publicados recientemente y científicos de todo el mundo desean trabajar con estas nuevas cepas de H5N1.

¿Qué elementos de la legislación nacional pueden resultar útiles para la aplicación de la Convención sobre Armas Biológicas mediante la utilización de este escenario como caso práctico?

1. Definiciones

1.1 ¿Por qué es importante definir qué es un arma biológica? ¿Podrían las nuevas cepas del virus H5N1 ser utilizadas como un arma biológica?

2. Disposiciones penales

2.1 ¿Qué sucede si los Estados no tipifican como delito el desarrollo, producción, posesión, adquisición, transferencia, transporte o uso de un arma biológica que contenga el virus H5N1?

2.2 ¿Se pueden utilizar otras disposiciones penales para procesar el uso de la cepa H5N1 como un arma?

3. Responsabilidad penal accesoria

3.1 ¿Qué es la responsabilidad penal accesoria? ¿Debe ser tipificada como delito?

4. Jurisdicción

4.1 ¿Qué tipo de jurisdicción es necesaria para procesar delitos relacionados con las nuevas cepas de H5N1?

5. Controles sobre las transferencias

5.1 ¿Qué sucede si el H5N1 no está incluido en la lista de materiales sometidos a control para transferencias? ¿El Estado podrá aun así controlar las transferencias del H5N1?

5.2 Los científicos han expresado interés en la adquisición de las nuevas cepas de H5N1 para llevar a cabo investigación con fines profilácticos. ¿Cómo puede un Estado controlar la transferencia de las nuevas cepas del H5N1?

5.3 Los científicos tal vez deseen adquirir el conocimiento de cómo desarrollar las nuevas cepas del virus H5N1. ¿Cómo pueden los Estados controlar la transferencia de conocimientos?

6. Medidas de bioseguridad y biocustodia

6.1 ¿Por qué un Estado necesita autorizar el uso, desarrollo, tenencia y transporte de las nuevas cepas del virus H5N1?

6.2 ¿Qué medidas de bioseguridad y biocustodia son necesarias para que los laboratorios autorizados dentro de la jurisdicción de un Estado puedan trabajar con las nuevas cepas del virus H5N1?

7. Aplicación de la ley

7.1 ¿Cómo puede un Estado tener la certeza de que los laboratorios que trabajan con las nuevas cepas del virus H5N1 tan sólo investigan para fines específicos profilácticos, de protección o para otros fines específicos?

7.2 ¿Qué medidas son necesarias para investigar y procesar los delitos relacionados con el empleo de la cepa H5N1 como un arma biológica?

7.3 ¿Cómo pueden los Estados responder a un brote derivado de una cepa del H5N1?