

**Proposals for further consideration by the Friend of the Chair
on Definitions of Terms and Objective Criteria**

ANNEX A. DECLARATIONS

I. LISTS AND CRITERIA (AGENTS AND TOXINS)⁴⁰

1. The list of agents and toxins following below is for use with [specific measures in particular] Article III, section D, subsection I, paragraphs ... [and section F]. ~~[In accordance with Article XI, this list shall not be interpreted as in any way modifying or amending the Convention.]~~⁴¹

~~[In this context the following criteria were used as a basis to establish the list of agents and toxins during the discussions of the Ad Hoc Group:]~~⁴²

40. The view was expressed that further consideration needs to be given to microorganisms carrying nucleic acid sequences coding for pathogenic properties of listed agents and toxins.

Another view was expressed that further consideration also needs to be given to nucleic acid sequences coding for toxins.

The view was expressed that live-attenuated microorganisms such as registered or recognized internationally vaccine strains should not be included as part of the lists.

41. ~~This text was introduced during the seventeenth session of the Ad Hoc Group but not discussed.~~

42. ~~A view was expressed that the lists of criteria are only aids to the Ad Hoc Group and should not be included in the Protocol. However, the Protocol should include procedures with defined time lines for the future review of the list of agents and toxins.~~

~~According to another view, criteria are important for selecting agents and toxins.~~

~~Whether criteria for human pathogens and toxins, for animal pathogens and for plant pathogens should be included in the Protocol together with the list of biological agents and toxins needs further discussion.~~

- ~~Agents or toxins known to have been developed, produced or used as weapons;~~
- ~~Agents or toxins which have severe public health and/or socio-economic effects;~~
- ~~High morbidity, incapacity and/or mortality rates;~~
- ~~Low infective/toxic dose;~~
- ~~High level of transmissibility and/or contagiousness;~~
- ~~Low effective or cost effective prophylaxis, protection or treatment available;~~
- ~~Ease of production and/or dissemination;~~
- ~~Stability in the environment;~~
- ~~Short incubation period and/or difficult to diagnose/identify at an early stage.]~~

2. Any State Party may propose modifications to the list. The Executive Council shall review such proposed modifications to the list of agents and toxins. Any changes to the list shall be made in accordance with Article XIV.⁴³

3. ~~In reviewing the list of agents and toxins the Executive Council shall consider, *inter alia*, [the above-mentioned criteria as well as] the following factors:~~

The following criteria were considered, *inter alia*, in developing the list of agents and toxins and shall be considered, *inter alia*, by the Executive Council in reviewing any proposed modifications to the list:

[(a) The potential of individual agents and toxins for use as weapons, for example, whether they are known to have been developed, produced, stockpiled or used as weapons; would have severe adverse socio-economic and/or public health effects; are difficult to diagnose and identify; have short incubation and high morbidity, incapacity and/or mortality rates; have a lack or limited availability of effective and economical prophylaxis and/or treatment; have a low infective or toxic dose; are easily produced and/or disseminated; are stable in the environment; and/or are highly contagious or easily transmissible;]

(b) Scientific and technological developments that may affect the potential of individual agents or toxins for use as weapons;

(c) Effects of potential inclusion or exclusion of an agent or toxin in the list on scientific and technical research and development.⁴⁴

4. The list is not exhaustive, it does not exclude the relevance for the Protocol of unlisted microbial or other biological agents or toxins [such as pests, arthropods and helminths]. ~~[In accordance with Article XI, this list shall not be interpreted as in any way modifying or amending the Convention.]~~

43. The view was expressed that review of and change to the list shall be addressed in Article III, section A and Article XIV.

44. Ibid.

5. In accordance with Article XI, this list shall not be interpreted as in any way modifying or amending the Convention.

[6. The microorganisms enumerated in the lists of human, animal and plant pathogens do not include live-attenuated strains which have been registered as such in official culture collections or are internationally recognized as such.]

7. Pathogens causing zoonotic diseases appearing in one section of the list shall also apply to the other sections.

A. HUMAN PATHOGENS

Viruses

1. Crimean-Congo haemorrhagic fever virus
2. Eastern equine encephalitis virus
3. Ebola virus
4. Sin Nombre virus
5. Junin virus
6. Lassa fever virus
7. Machupo virus
8. Marburg virus
9. Rift Valley fever virus
10. Tick-borne encephalitis virus
11. Variola major virus (Smallpox virus)
12. Venezuelan equine encephalitis virus
13. Western equine encephalitis virus
14. Yellow fever virus
15. Monkeypox virus

Bacteria

1. Bacillus anthracis
- ~~2. Brucella abortus~~
3. Brucella melitensis
4. ~~Brucella suis~~
5. Burkholderia (Pseudomonas) mallei
6. Burkholderia (Pseudomonas) pseudomallei
7. Francisella tularensis tularensis
8. Yersinia pestis

Rickettsiae

1. Coxiella burnetii
2. Rickettsia prowazekii

3. Rickettsia rickettsii

[Protozoa

1. Naegleria fowleri
2. Naegleria australiensis]

B. ANIMAL PATHOGENS

Bovine pathogens

1. ~~{Contagious bovine (pleuropneumonia)/Mycoplasma mycoides var. mycoides}~~
2. {Foot and mouth disease virus}
3. Rinderpest virus
4. [Vesicular stomatitis virus]

Ovine pathogens

1. {Foot and mouth disease virus}
2. ~~{Peste des petits ruminants virus}~~
3. [Blue tongue virus]

Swine pathogens

1. African swine fever virus
2. {Classic swine fever virus (Hog cholera virus)}
3. {Foot and mouth disease virus}
4. ~~{Teschén disease virus (Porcine enterovirus type 1)}~~

Avian pathogens

1. {Avian influenza virus (Fowl plague virus)}
2. [Newcastle disease virus]

Equine pathogens

1. [African horse sickness virus]

The following pathogens were proposed to be discussed for future inclusion in the list of animal pathogens:

1. [Teschén disease virus (Porcine enterovirus type 1)]
2. [Peste des petits ruminants virus]
3. [Contagious bovine (pleuropneumonia)/Mycoplasma mycoides var. mycoides]

C. PLANT PATHOGENS

Cereal pathogens

1. [Puccinia graminis]
2. Tilletia indica
3. [~~Claviceps purpurea~~]

Sugar cane pathogens

1. [Sugar cane Fiji disease virus]
2. Xanthomonas albilineans

Cash crop pathogens

1. [Colletotrichum coffeanum var. virulans]
2. [Erwinia amylovora]
3. [Ralstonia solanacearum]
4. [~~Xanthomonas campestris pv citri~~]
5. [Sclerotinia sclerotiorum]
6. [~~Peronospora hyoscyami de Bary f.sp. tabacina (Adam) skalicky~~]

Forest pathogens

1. [Dothistroma pini (Scirrhia pini)]

The following pathogens were proposed to be discussed for further inclusion in the list of plant pathogens:

1. [Peronospora hyoscyami de Bary f.sp. tabacina (Adam) skalicky]
2. [Xanthomonas campestris pv citri]
3. [Claviceps purpurea]

[~~Thrips palmi Karny~~
~~Frankliniella occidentalis~~]⁴⁵

45. It was suggested that since these items are not agents or toxins they should be discussed in an appropriate section.

D. TOXINS

Bacteriotoxins

1. Botulinum toxins
2. Clostridium perfringens toxins
3. Staphylococcal enterotoxins
4. Shigatoxins

Phycotoxins

1. Anatoxins
2. Ciguatoxins
3. Saxitoxins

Mycotoxins

1. Trichothecene toxins

Phytotoxins

1. Abrins
2. Ricins

Zootoxins

1. Bungarotoxins

[Definition of some terms

~~Morbidity: Ratio of [new] cases of disease to total population over certain period of time in the infected area;~~

~~Contagiousness: Capability to be communicable;~~

~~Incapacity: Lack of physical or intellectual power;~~

~~Mortality: Ratio of dead to total population over certain period of time in the infected area.]~~