Annex 9

**USA COMMENTS**

CHAPTER 6.12.  
  
**ZOONOSES TRANSMISSIBLE  
FROM NON-HUMAN PRIMATES**

[…]

Article 6.12.4.

**Quarantine requirements for non-human primates from an uncontrolled environment**

*Veterinary Authorities* of *importing countries* should require for shipments which originate from the wild or other sources where they were not subjected to permanent veterinary supervision:

1) the presentation of the documentation referred to in Article 6.12.3.;

2) the immediate placement of the animals in a *quarantine station* meeting the standards set in Chapter 5.9. for at least 12 weeks; and during this quarantine:

a) all animals to be monitored daily for signs of illness and, if necessary, be subjected to a clinical examination;

b) all animals dying for any reason to be subjected to complete post-mortem examination at a *laboratory* approved for this purpose;

c) any cause of illness or death to be determined before the group to which the animals belong is released from quarantine;

d) animals to be subjected to the following diagnostic tests and treatments in accordance with Chapter 4.16.:

| **Disease/agent** | **Animal groups** | **Schedule** | **Methods** |
| --- | --- | --- | --- |
| **Endo- and ectoparasites** | All species | At least two tests, one of which should be at the start, the other towards the end of the quarantine. | Testing methods and antiparasitic treatment as appropriate to species of animal and parasitic agent. |
| **Tuberculosis** (M*ycobacterium tuberculosis* complex) | ~~Marmosets and tamarins~~ All | ~~Two~~ Three tests at an interval of 2 to 4 weeks. | Skin test or serology. In-vitro gamma interferon assay or polymerase chain reaction (PCR) assay. The skin test using mammalian tuberculin (old tuberculin) is the most reliable of all. Skin tests in marmosets, tamarins or small prosimians should be performed in the abdominal skin rather than in the eyelid. In some species (e.g. orang utan), skin tests for tuberculosis are notorious for false positive results. Comparative tests using both mammalian and avian PPD, together with cultures, radiography, ELISA, in-vitro gamma interferon assay and PCR of gastric or bronchial lavage, faeces or tissues may eliminate confusion. |

**RATIONALE:** Recommend that all species of NHPs recieve 3 negative tuberculin skin tests using mammalian old tuberculin. This suggestion is based on the Institute of Laboratory Animal Research guidelines and a CDC report regarding TB in nonhuman primates, both stating: “Each animal in an incoming group should be tested with tuberculin at 2-week intervals in alternate eyelids until no positive reactors are found in the group on three consecutive tests.” Additionally, the gamma interferon assay for NHP is not currently available in the United States and may not be available globally. Additionally, mammalian old tuberculin may not be available globally. It may be difficult to come up with one test that is available everywhere. Note that PPD is not adequate to identify tuberculosis in a NHP.

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| --- | --- | --- | --- |
|  | Prosimians, New World monkeys, Old World monkeys, gibbons and great apes | At least three tests at intervals of 2 to 4 weeks. |  |
| **Other bacterial pathogenic agents** (*Salmonella*, *Shigella* and *Yersinia* and others as appropriate) | All species | Daily test for 3 days after arrival, and at least one or two more tests at intervals of 2 to 4 weeks. | Faecal culture. The fresh faeces or rectal swabs should be cultured immediately or be placed immediately in the appropriate transportation medium. |
| **~~Hepatitis B~~** | ~~Gibbons and great apes~~ | ~~First test during first week; second test after 3 to 4 weeks.~~ | ~~Serological tests for anti-hepatitis B core antigen and for hepatitis B surface antigen, and additional parameters as appropriate.~~ |

*Veterinary Authorities* of *importing countries* should recognise the public health importance of zoonoses listed in the table ~~below~~ above as well as measles (a human disease, sometimes affecting non-human primates), hepatitis A, monkey pox, Marburg disease or Ebola/Reston virus, retroviruses, etc., even though this article does not recommend specific testing or treatment protocols for these agents during the quarantine period. *Veterinary Authorities* should recognise that, if animals are infected, the importation and spread of many such agents will be best controlled by the detection of clinical signs of disease during a 12-week quarantine period.

Certain endemic viruses, such as herpesviruses or retroviruses, may be present in both wild and captive populations of primates. These viruses are often asymptomatic in primate species. If animals are being imported to be introduced to other populations of the same species, it may be advisable to determine if the animals selected for importation have similar viral profiles to the established population.

[…]

Article 6.12.6.

**Certification and quarantine requirements for other non-human primates from premises under veterinary supervision**

*Veterinary Authorities* of *importing countries* should require:

for prosimians, New World monkeys, Old World monkeys, gibbons and great apes from premises under veterinary supervision

1) the presentation of an *international veterinary certificate* attesting that the shipment meets the requirements specified in Article 6.12.3., and that the animals:

a) are either born in the premises of origin or have been kept there for at least two years;

b) come from premises which are under permanent veterinary supervision, and where a suitable health monitoring programme is followed, including microbiological and parasitological tests as well as necropsies;

c) have been kept in buildings and enclosures in which no *case* of tuberculosis has occurred during the last two years prior to shipment;

d) come from premises in which no *case* of tuberculosis or other major zoonoses including rabies has occurred during the last two years prior to shipment in the building where the animals were kept;

e) were subjected to a tuberculosis test on ~~two~~ three occasions with negative results, at an interval of at least two weeks between each test during the 30 days prior to shipment;

**RATIONALE:** To decrease the TB testing in quarantine after NHPs arrive in a country, we suggest at least 3 negative tests at least 14 days apart and complete physical exams and serum chemistries prior to shipment. Otherwise, we would require 3 negative TB tests after arrival.

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f) were subjected to a diagnostic test for pathogenic enteric bacteria including *Salmonella*, *Camplylobacter, Shigella* and *Yersinia*;

**RATIONALE:** Known pathogen risk.

g) were subjected to diagnostic tests for, and appropriate treatment against, endo- and ectoparasites;

~~h)~~ ~~were subjected to a diagnostic test for hepatitis B virus and their current status documented (gibbons and great apes only);~~

2) the placement of the animals in a *quarantine station* for at least 30 days, and during this period:

a) all animals to be monitored daily for signs of illness and, if necessary, subjected to a clinical examination;

b) all animals dying for any reason to be subjected to complete post-mortem examination at a laboratory approved for this purpose;

c) any cause of illness or death to be determined before the group to which the animals belong is released from quarantine;

d) animals to be subjected to the following diagnostic tests and treatments in accordance with Chapter 4.16.:

| **Disease/agent** | **Animal groups** | **Schedule** | **Methods** |
| --- | --- | --- | --- |
| **Tuberculosis** *(Mycobacterium tuberculosis* complex) | All species | ~~One~~ Three tests. | Skin test or serology. In-vitro gamma interferon assay or polymerase chain reaction (PCR) assay. (See further comments in the Table of Article 6.12.4.) **General comment below.** |
| **Other bacterial pathogenic agents** (*Salmonella*, *Shigella* and *Yersinia* and others as appropriate) | All species | Daily test for 3 days after arrival, and another test at least one week later. | Faecal culture. (See further comments in the Table of Article 6.12.4.) |
| **Endo- and ectoparasites** | All species | At least two tests, one of which should be at the start, the other towards the end of the quarantine. | Testing methods and antiparasitic treatment as appropriate to species of animal and parasitic agent. |

*Veterinary Authorities* of *importing countries* may not normally require any tests for viral diseases. However, stringent precautions to ensure human health and safety should be followed as recommended in Article 6.12.7.

**RATIONALE:** To decrease the TB testing in quarantine after NHPs arrive in a country, we suggest at least 3 negative tests at least 14 days apart and complete physical exams and serum chemistries prior to shipment. Otherwise, we would require 3 negative TB tests after arrival.

**General Comment:** The gamma interferon assay may not be available globally. Only mammalian old tuberculin is useful for the skin test. PPD will not pick up tuberculosis in a NHP.

Article 6.12.7.

**Precautionary measures to be followed by staff exposed to non-human primates or to their body fluids, faeces and tissues**

The presence in most non-human primates of some zoonotic agents is almost unavoidable, even after release from quarantine. The relevant Authorities should, therefore, encourage the management of institutions whose staff are exposed to non-human primates or their body fluids, faeces or tissues (including when performing necropsies) to comply with the following recommendations:

1) to provide staff with training in the proper handling of primates, their body fluids, faeces and tissues, with respect to zoonoses containment and personal safety;

2) to inform their staff that certain species should be considered as having lifelong *infections* with some zoonotic agents, e.g. ~~Asian~~ macaques with Herpes B virus;

**RATIONALE:** All macaques can carry Herpes B virus.

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3) to ensure that the staff follows personal hygiene practices, including the use of protective clothing, and the prohibition of eating, drinking and smoking in potentially infective areas;

4) to implement a screening programme for personnel health, including monitoring for tuberculosis, pathogenic enteric bacteria and endoparasites and other agents that are deemed necessary;

5) to implement an immunisation programme as appropriate, including e.g. tetanus, measles, poliomyelitis, rabies, hepatitis A ~~and B~~, and other diseases, such as yellow fever, endemic in the area of origin of the ~~African and American~~ non-human primates;

**RATIONALE:** Clarification.

6) to develop guidelines for the prevention and treatment of zoonoses that may be transmitted by bites and scratches, e.g. rabies and herpes viruses;

7) to issue to their staff a card which states that they work with non-human primates or with their body fluids, faeces or tissues, and which may be presented to the medical profession in case of illness;

8) to dispose of carcasses, body fluids, faeces and tissues in a manner which is not detrimental to public health.

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