



Australian Government
Biosecurity Australia

2005/7757

11 November 2005

BIOSECURITY AUSTRALIA POLICY MEMORANDUM 2005/16*

**IMPORTATION OF HORSES FROM THE UNITED ARAB EMIRATES AND THE
RETURN OF AUSTRALIAN HORSES FROM THE EMIRATES**

This Biosecurity Australia Policy Memorandum (BAPM) advises stakeholders of the review and proposed reinstatement of quarantine requirements for the temporary importation of horses from the United Arab Emirates (UAE) for racing and other competition purposes, and the review of, and proposed amendments to, the requirements for the return of Australian horses after international events in the Emirates. We would welcome stakeholder comments by 15 December 2005.

Importation of horses from the UAE

Conditions for the importation of horses from the UAE for racing and other competition purposes were promulgated in July 1995 while conditions for permanent importation came into effect in September 1995. Both included a certification requirement for each horse to be imported that “for the two months immediately prior to export the horse was continuously resident in part, or parts, of the territory of the United Arab Emirates in which no case of Borna disease or surra had been reported in equines during the past 12 months”. Surra is a disease of horses, camels and other animals due to infection with the protozoan parasite *Trypanosoma evansi* which is transmitted by biting flies, usually tabanids.

The conditions were suspended on advice from the UAE veterinary authorities that they were unable to provide the required certification for surra following a report of a clinical case of surra in a horse, the first officially recorded in the Emirates, in May 1996 some 150 km from Dubai, and advice on the subsequent testing for surra of sera collected as part of a biennial equine disease survey.

Return of Australian horses from the United Arab Emirates after international races

Conditions for the return of Australian horses from the UAE after international races came into effect in December 1995. These were amended in 1997 following the report of surra and include requirements that the horses remain in isolation in insect-protected premises while in the UAE, a distance separation of 200 metres from cattle and camels, treatment with an insect repellent prior to leaving the premises for training or racing, and export within two weeks of arrival in the UAE.

Developments

In February 1999, a generic import risk analysis (IRA) was commenced to review the quarantine policy on the importation of horses from countries in which the trypanosome disease ‘surra’ is present, with particular reference to the importation of horses from Malaysia and the UAE.

Although this generic IRA has not yet been finalised more information is now available on the situation in the UAE and elsewhere with respect to surra; sufficient to allow Biosecurity Australia to conclude that the likelihood of introducing *T. evansi* with the import of horses for racing or other competition purposes or the return of Australian horses from the UAE is extremely low. Biosecurity Australia proposes a number of additional requirements that reduce the quarantine risk further. Attached is a background paper supporting Biosecurity Australia's position (Attachment A).

Proposals

Biosecurity Australia recommends

- . re-instatement of the former requirements for the temporary importation of horses from the UAE for racing or other competition purposes that include: no case of surra reported in equines in the previous 12 months; holding of the horse for 14 days pre-export quarantine (PEQ) in insect-screened stables; the horse testing negative for surra by an approved ELISA during PEQ; the PEQ premises located at least 200 metres from camels or livestock; and the post-arrival quarantine (PAQ) premises fumigated with an insecticide and horses treated with an insect repellent
 - the conditions also include provisions for the importation of horses that are sero-positive for piroplasmiasis as provided for in the requirements for the temporary importation of horses from other countries.
- . with limited demand for permanent importation of horses from the UAE, the review of these suspended conditions be delayed until responses to this memorandum are considered.
- . the requirements for the return of Australian horses from the UAE after international races be amended by extending them to apply to horses taking part in other international events, eg endurance rides; deleting the requirement that horses return to Australia within 14 days of arrival in the UAE; including a requirement for 7 days PEQ; and testing for surra by an approved ELISA during PAQ. This testing allows time for the development of antibodies in the unlikely event the horse has been exposed to *T. evansi* while in the UAE.

Apart from the additional surra conditions, the requirements align closely with those for horses from a range of other countries, ie Hong Kong, Singapore, Japan, the United States and Europe. The proposed requirements, written in the format used in the Australian Quarantine and Inspection Service (AQIS) import conditions database (ICON), are at Attachments B and C.

Next steps

Biosecurity Australia would welcome your comments on the attached amended conditions by 14 December 2005. We will take into account stakeholder comments as we finalise the conditions.

Please pass this notice to other interested parties. If those parties wish to be included in future communications on this matter they should get in touch with the contact officer listed below. Alternatively, if you wish to be removed from the distribution list, please advise the contact officer.

Information on all IRAs and policy reviews being conducted by Biosecurity Australia is available on the Internet at <http://www.daff.gov.au/biosecurityaustralia>

Confidentiality

Stakeholders are advised that, subject to the *Freedom of Information Act 1982* and the *Privacy Act 1988*, all submissions received in response to policy memoranda will be publicly available and may be listed or referred to in any papers or reports on the subject matter of the memoranda.

The Commonwealth reserves the right to reveal the identity of a respondent unless a request for anonymity accompanies the submission. Where a request for anonymity does not accompany the submission the respondent will be taken to have consented to the disclosure of his or her identity for the purposes of Information Privacy Principle 11 of the *Privacy Act 1988*.

The contents of the submission will not be treated as confidential unless the submission is marked 'confidential' and they are capable of being classified as such in accordance with the *Freedom of Information Act 1982*.

ROBYN MARTIN
General Manager
Animal Biosecurity

Contact officer: Bernard Robinson
Telephone no: (02) 6272 5446
Facsimile no: (02) 6272 3399

E-mail Bernard.robinson@daff.gov.au

* Please note Biosecurity Australia has introduced a single system of 'Biosecurity Australia Policy Memoranda (BAPMs)' covering both animal and plant issues. This replaces the previous Animal Biosecurity Policy Memoranda and Plant Biosecurity Policy Memoranda.

BACKGROUND PAPER

Surra in horses in the UAE

Following the diagnosis of a single case of equine surra in 1996 in the UAE, 439 horses were serologically tested for surra using sera collected for a routine biennial equine disease survey in late 1995 and early 1996. The test used was the antibody ELISA (Ab-ELISA) (as described in the Office International des Epizooties (OIE) Manual of Diagnostic Tests and Vaccines) using a *T. equiperdum* positive serum as positive control. There were 24 'positive' and 120 'inconclusive' results. Follow-up investigations of 4 'positive' and 26 'inconclusive' reactors in the Dubai area revealed no history of clinical surra on the premises of origin of any of these horses. The four positives were re-tested and only two were 'positive' on the repeat test. Diagnostic testing of horses by Ab-ELISA in 1996, 1997 and 1998 also yielded 'positive' results in a significant number of horses. The lack of any clinical evidence of surra apart from the single case in 1996 led to the conclusion that these were quite likely false positive reactions. The finding of high optical density (OD) levels, ie, 'positive' results, in 15% of 130 surra-negative sera imported from the UK, tested in association with an experiment to evaluate diagnostic tests in horses (Wernery et al, 2001), supported this conclusion.

No case of surra has been reported in horses in the UAE since the single case in 1996 other than in seven horses intravenously inoculated with *T. evansi* parasites derived from a camel in 1998 in the afore-mentioned experiment designed to evaluate diagnostic tests in horses. During the trial, the seven inoculated horses and one horse maintained as an uninfected negative control were stabled in single air-conditioned, insect-proofed boxes. All the horses were euthanized at the end of the trial.

In the years 2000 to 2004 inclusive the UAE carried out, for export purposes, testing of 128 equines for surra by an indirect fluorescent antibody test (IFAT) and 27 by Ab-ELISA, all with negative results. Some hundreds of horses travel from the UAE to Europe, the USA, Singapore, Japan, Hong Kong and Macau every year. There have been no reports of infected animals in these countries.

The UAE has a small and fairly specialised horse population consisting of valuable competition horses (racing, endurance, show jumping and polo). Management practices and veterinary services are of high standard. Surra experts generally agree that the exposure of naïve horses to *T. evansi* infection will normally lead to clinical disease within 1 to 2 weeks. In these circumstances it is highly likely that, in the UAE, suspect cases would be examined, tentative diagnosis would be prompt, samples would be submitted to the UAE Central Veterinary Research Laboratory and confirmed cases reported to the UAE Department of Animal Wealth.

Surra (*Trypanosoma evansi*) is an OIE listed disease and the UAE, as a member country of the OIE, is obliged to notify the OIE of significant events in the evolution of surra, and information of epidemiological significance to other countries, in accordance with Article 1.1.2.3. of the OIE Terrestrial Animal Health Code.

Local racehorses are kept and trained in dedicated facilities distant from camel yards. International horses in Dubai for the Dubai World Cup (DWC) are stabled at the DWC Quarantine facility. There are no camel establishments within 2 kilometres of the quarantine facility and camels do not come within 500 metres of the stables or the track at any time. The efficiency of transmission of *T. evansi* by tabanid flies is decreased by the lack of proximity to an infected host. Foil (1983) demonstrated that a proportional relationship exists between the number of tabanids returning to the original host

after interruption of feeding and the distance between hosts. Only 5% and 1% of flies (*Tabanus fuscicostatus*) moved to new hosts 36.2 metres and 43.8 m away respectively. Increasing the length of time between feeding on an infected host and an uninfected host also reduces infectivity. Leclerq (1952) reported the probability of transmission was reduced to 0.5 after 15 minutes and to 0.04, 0.003, 0.001 and 0.0003 when the interval was 1, 3, 6 and 24 hours respectively.

Surra in camels

In the last decade 1,481 to 3,147 camels have been serologically tested in the UAE, annually, using the Ab-ELISA. These samples are sent for testing by camel veterinarians who have some reason to suspect that an animal may be infected (eg poor performance or low red blood cell counts). As such, results probably indicate a higher than true prevalence. Sero-prevalence declined from about 15% in 1994/95 to 0.8% in 2000 and has since risen to apparently stabilise at about 5%. The decrease is attributed to better husbandry and the introduction, and then routine use, of Cymelarsan in racing camels. The apparent increase since 2000 is attributed to the use of a biotin labelled conjugate in the ELISA instead of the peroxidase labelled conjugate used previously, leading to an increase in apparent sensitivity, and to the introduction of a computer reading system which does not differentiate between strong and weak/doubtful positives which are all reported as positive (Morton¹, pers comm, 2005). The true prevalence is therefore considered likely to be significantly lower than 5%.

Conclusions

The likelihood that *T. evansi* would be introduced to Australia through the temporary importation of horses from the UAE for racing or other competition under the former requirements is extremely low. Additional conditions for PEQ and PAQ premises will further reduce any risk.

The likelihood is also extremely low for Australian horses returning from the UAE after competing in international races and other equestrian events (such as endurance rides). It is considered that there is negligible risk in allowing horses to remain in the UAE for more than two weeks up to a maximum of two months, subject to pre-export isolation and testing for surra during PAQ

References

Wernery et al (2001) Preliminary evaluation of diagnostic tests using horses experimentally infected with *Trypanosoma evansi*. *The Veterinary Journal* 161: 287-300

Foil LD (1983) A mark-recapture method for measuring effects of spatial separation of horses on tabanid (Diptera) movement between hosts. *Journal of Medical Entomology* 20: 301-305.

Leclerq M (1952) Introduction à l'étude des tabanids et revision des espèces de Belgique. *Memoires de l'Institut Royale des Sciences Naturelles de Belgique* 123: 1-80.

¹ Dr Tom Morton, Veterinary Advisor, Department of Animal Wealth, Dubai, United Arab Emirates