

EDUCATION, SCIENCE AND TRAINING

SENATE LEGISLATION COMMITTEE – QUESTIONS ON NOTICE 2003-2004 SUPPLEMENTARY ESTIMATES HEARING

Outcome: CSIRO
Output Group: - CSIRO

DEST Question No. E528_04

Senator Carr asked on 5 November 2003.

Question:

Is CSIRO now, or in the past twelve months been involved in research at Australian facilities on viable specimens of the following:

- Anthrax
- Smallpox
- Foot and mouth disease
- Severe Acute Respiratory Syndrome
- Sheep pox
- Screw worm
- Blue tongue
- Rift valley fever

(a) When did the research on each disease begin?

(b) When will the research on each disease conclude?

Answer:

CSIRO has provided the following response.

Viable specimens of diseases

The CSIRO Australian Animal Health Laboratory (AAHL) has provided the following information on its research in relation to the above questions:

- **Anthrax**
Yes. Diagnostic tests need to be done each year to check that AAHL can isolate the organism. Work with this agent has been done intermittently since 1985, and such work is likely to continue in the future.
- **Smallpox**
CSIRO does not hold viable smallpox virus. (AAHL does have substantial skills with the vaccine used for smallpox – vaccinia virus – as it is used for vaccine studies in construction of recombinant vaccines against a wide variety of other diseases including HIV/AIDS. These activities are ongoing.)
- **Foot and mouth disease**
AAHL does not hold live foot and mouth disease virus and is specifically prohibited from doing so. Importation to Australia is prohibited. (AAHL does undertake research with inactivated materials from foot and mouth disease as part of its continuing development and validation of tests for emergency disease diagnosis preparedness.)

- **Severe Acute Respiratory Syndrome**
Yes. SARS virus was imported to the Victorian Infectious Disease Reference Laboratory earlier this year and sent, under AQIS permit, to AAHL where the agent was used to raise antibodies in experimental animals. All work is conducted at the highest level of containment available at AAHL – Biosecurity Level 4. The research commenced in 2003 and will continue for 1 to 2 years.
- **Sheep pox**
AAHL does not hold viable sheep pox virus or its related capripoxviruses, goat pox and lumpy skin disease viruses. (AAHL is to commence a program of research in collaboration with Australian Wool Innovation and the National Centre for Foreign Animal Disease, Winnipeg, Manitoba, Canada to improve AAHL's ability to detect and diagnose sheep pox. All work with the live virus will be conducted in Canada. Live virus will not be imported to AAHL. This program will be undertaken over the next 3 years.)
- **Blue tongue**
AAHL holds and maintains a wide range of bluetongue virus serotypes and strains. These include strains isolated in Australia, vaccine strains and strains imported from overseas countries. AAHL maintains ongoing emergency disease preparedness for bluetongue including characterisation of strains isolated in Northern Australia each year and use of bluetongue infections in animals for the training of Australian veterinarians. Work with bluetongue viruses has been done at AAHL since 1984 and is likely to continue in the future.
- **Rift valley fever**
Yes. A vaccine strain has been propagated for use either as a positive control for quarantine testing, or to prepare diagnostic material in anticipation of the need to test live sheep returned from Indian Ocean. Work with this vaccine strain commenced in 2002.

CSIRO Entomology has provided the following information on its research in relation to the above questions:

- **Screw worm**
CSIRO Entomology has been involved in activities related to screw worm fly but has not performed research involving viable specimens during this period.

(a) Please see above answers for information on when research began on each disease.

(b) All the above work is part of on-going activity related to the risk management of exotic disease and therefore unlikely to be concluded as such.