



## Anthrax in Animals

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*The following information has been put together for the benefit of the general public wanting to gain a greater understanding of Anthrax in animals. It explains a little about the history of the disease in Australia, its symptoms and occurrence, and Victoria's prevention and control methods.*

### What is the history of anthrax in Australia?

Anthrax has been recognised in Australia for over 150 years as a cause of sudden death in farm animals, particularly sheep and cattle. The spore-forming bacteria *Bacillus anthracis*, which causes the disease, was probably introduced into Australia in the early 1880's by contaminated fertiliser imported from the Indian sub-continent. Prior to the availability of an effective vaccine, anthrax was a major cause of mortalities in sheep and cattle and was widely spread in pastoral areas by travelling livestock. Spores of *Bacillus anthracis* can lie dormant in the soil for decades and are capable of infecting animals which graze on contaminated areas.

### Where does anthrax occur?

Anthrax is well known to occur at irregular intervals in grazing livestock in the pastoral areas of NSW, Northern Victoria and Gippsland, where anthrax spores are able to persist in soils.

### What are the signs of infection in livestock?

Just prior to death, animals may show signs of high fever. Livestock owners usually report unexplained, sudden deaths of livestock. Dark tarry discharges from the external orifices of dead animals are often, but not always, observed.

### What action is taken if anthrax is suspected?

The owner, or their veterinarian, must report the case to DPI staff. Movement of animals and animal products from the farm is suspended. Appropriate samples are collected and tested at a laboratory. This can take 12 - 24 hours. If the case occurs on a dairy farm, the dairy factory is advised. Relevant food safety and public health agencies are also routinely notified.

### What action is taken on confirmation?

Where a case of anthrax is confirmed after veterinary examination of affected animals and laboratory testing of samples, the affected property is quarantined, potentially exposed stock are vaccinated, dead animals burnt and contaminated sites disinfected. The quarantine is not released until occurrences of anthrax cases have ceased and at least six weeks elapsed since the last round of vaccination on the property. DPI staff liaise with knackeries, local veterinary practitioners, dairy industry, health authorities, local government and regional emergency services staff.

### When does anthrax occur?

Anthrax can occur at any time, usually during the summer months. Usually isolated cases are reported and quarantine and vaccination measures prevent further cases. Occasionally, a larger scale outbreak occurs, such as that involving dairy cattle and other animals in the summer of early 1997 in the Tatura district of Victoria. Such outbreaks are controlled by vaccination across a wider area.

### What measures are taken by DPI to prepare for an outbreak?

DPI maintains a 24 hour, 365 days/year emergency contact service to allow reports to be quickly actioned. DPI has comprehensive policy and operational procedures for the management of anthrax, which cover notification, quarantine, disinfection, disposal of carcase and products, surveillance and vaccination. Australian veterinary authorities maintain emergency plans, based on AUSVETPLAN, for the control of a large-scale anthrax outbreak. These plans include collaborative arrangements with a range of government authorities and industry organisations.

The measures taken in Australia to deal with occurrences of anthrax in farm animals are well developed and designed to limit and control disease outbreaks, protect domestic and export markets for livestock and their products, and safeguard public health.

Livestock owners and veterinarians in areas of Australia where anthrax occurs, are reminded seasonally to be alert to signs of the disease and to report, without delay, suspicious cases to veterinary authorities so appropriate

investigations can be undertaken and control measures instituted if necessary. DPI pays a fee to veterinary practitioners who investigate suspect anthrax cases.

DPI maintains a stock of anthrax vaccine for use in an outbreak.

Private veterinarians can be contracted at short notice to assist with collection of specimens and vaccination of at risk livestock, as occurred in the 1997 Tatura outbreak.

Victoria has the necessary legislation in place to effect the necessary disease control measures to deal with an outbreak. Victorian emergency management arrangements ensure a multi-agency response involving all relevant agencies (such as SES, Police, Department of Human Services and local government).

### **In Victoria, what impact does anthrax infection in animals have on the human population?**

Very few human cases have been reported in Victoria. The greatest risk is to those who handle dead livestock such as farmers, veterinarians and knackery workers. The last

documented case of human anthrax in Victoria was a knackery worker infected during the Tatura outbreak. He had contact with an infected carcass, developed the cutaneous form of anthrax, was treated and made an uneventful recovery.

### **Who can I contact for further information?**

The DPI Customer Service Centre can put you in touch with your local animal health expert. Contact the Customer Service Centre on phone: 136 186. Livestock owners and veterinarians are reminded to report suspected cases to local veterinary authorities. For information related to public health please contact the Department of Human Services on phone: 1300 365 677 or visit their web site at <http://www.health.vic.gov.au/phtopics/>

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