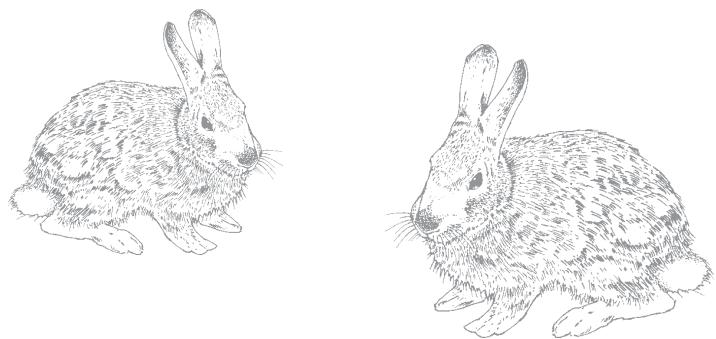
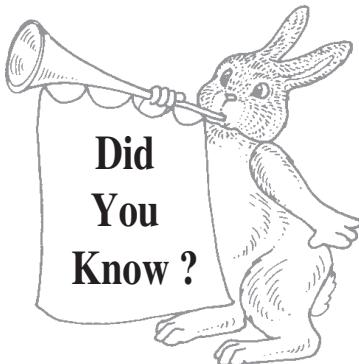


# Rabbit Calicivirus Disease



Pitjantjatjara Council  
November 95

# Rabbit Calicivirus Disease



## 1. What Happened.

Rabbit Calicivirus Disease (RCD) was being field tested on Wardang Island in Spencer Gulf, South Australia by the CSIRO.

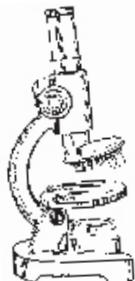
In early October 95 this disease, which kills rabbits, was accidentally released to the main land and quickly spread to the Yunta district 260 km north-east of Adelaide. It is now impossible to stop this disease spreading through the rest of the rabbit population in Australia.

It is not known how long it will take to spread to Central Australia and kill the rabbits on the lands.

## 2. The Testing of Rabbit Calicivirus Disease.

For the past two and a half years CSIRO scientists have been testing the effects of Rabbit Calicivirus on Australian rabbits. This work has been done at Geelong in Victoria where the virus has been tested on other animals as well as rabbits. None of the other animals got sick or died, only the rabbits died.

Australia has lots of rabbits and many people don't want them here because they eat all the grass and the soil blows away.



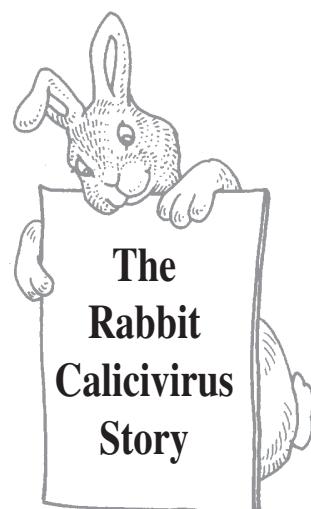
## 3. Rabbit Calicivirus Disease kills Rabbits.

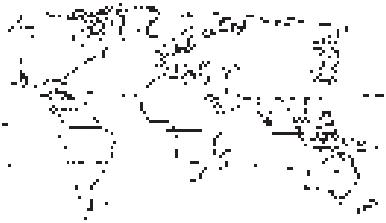
This virus was being tested by the scientists because they wanted something which would kill rabbits quickly. They were happy that the Rabbit Calicivirus was not dangerous to people and animals, but it would kill all the rabbits.

## 4. Where Did Rabbit Calicivirus Disease Originate?

Rabbit Calicivirus Disease first appeared in China in 1984. It quickly spread to Europe and Mexico and has now affected rabbits in forty countries on four continents.

Scientists are not sure whether Rabbit Calicivirus Disease originated in China or Europe. Chinese scientists say that the outbreak in China followed the introduction of Angora rabbit breeding stock from Germany. Rabbit Calicivirus Disease is related to European Brown Hare Syndrome, however laboratory studies show that it is impossible to infect rabbits with European Brown Hare Syndrome virus, or hares with Rabbit Calicivirus.





## 5. How has Rabbit Calicivirus Disease Spread?

Rabbit calicivirus disease has been spread around the world by people trading in domestic rabbits. In Europe, it was first recognised in Italy in 1986, where it killed 64 million farmed rabbits. The virus has spread to most of western Europe, passing into France in 1987, and Spain in 1988. The virus progressed from Italy reaching Switzerland in 1988, Germany in 1989. Denmark in 1990, the Swedish island of Gotland in 1990, and southern Sweden in 1993.

## 6. How does Rabbit Calicivirus Disease kill Rabbits?

Rabbit Calicivirus Disease causes the rapid development of blood clots in major organs such as lungs, heart and kidneys. These clots block blood vessels and result in death from heart and respiratory failure within 30-40 hours.



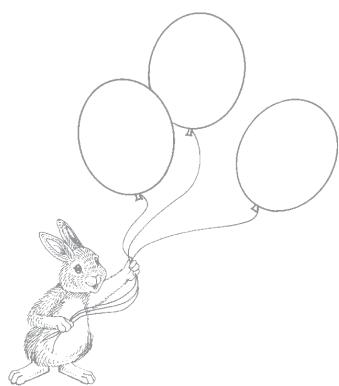
## 7. How is Rabbit Calicivirus Disease Transmittted to other Rabbits?

Rabbit Calicivirus Disease is transmitted between rabbits by contact with another infected rabbit and by contact with excreta contaminated with the virus. Insects such as rabbit fleas, can spread the virus between rabbits in the laboratory, but generally only if transmission occurs immediately.

Birds or insects may be able to transmit the virus in the field by carrying it on their bodies. The virus does not reproduce within birds or insects. This means the virus will not reproduce within these organisms.

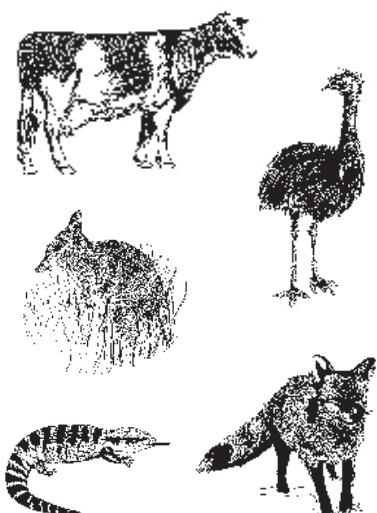
## 8. Do young Rabbits who survive Calicivirus Disease (under 5-8 weeks) become Immune for Life?

Some young rabbits do survive Rabbit Calicivirus Disease. These rabbits can survive to become the breeding population in the following year. Maternal antibodies can be passed to the young and confer immunity, however this immunity is temporary. The next generation of young become susceptible and Rabbit Calicivirus Disease can spread through the population once again.



## 9. Can Humans be Affected by Rabbit Calicivirus Disease?

Rabbit calicivirus has been known in Europe and China for over 10 years. Many humans have been exposed to the virus on rabbit farms, however there are no reports in the scientific or medical literature of



## 10. Will Rabbit Calicivirus Disease Harm other Animals?

The animals tested included the following:

*Domestic animals:* horses, cattle, sheep, deer, goats, pigs, dogs, cats, and fowls.

*Feral animals:* foxes, hares, ferrets, rats, and mice.

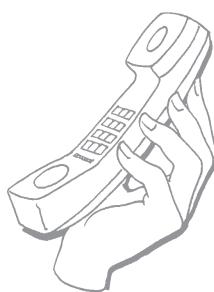
*Australian native mammals:* bush rats, spinifex hopping mice, plains rats, fat-tailed dunnarts, northern brown bandicoots, brush-tailed bettongs, tammar wallabies, and brushtail possums.

*Birds:* long-billed corellas, feral pigeons, silver gulls, brown falcons, and emus.

*Reptiles:* common blue-tongue lizards.

## 11. How to recognise a Rabbit with Rabbit Calicivirus Disease.

After about 18 hours of infection with rabbit calicivirus, adult rabbits become progressively quieter and within 30-40 hours of being infected, they die quietly with minimal apparent distress. Some rabbits may appear depressed and reluctant to move, after one day of becoming infected. At this stage, some may have an increased temperature (from approximately 39 degrees centigrade up to 42 degrees centigrade). Other rabbits have an increased respiratory rate a few hours prior to death. Ask the local veterinarian how to protect pet rabbits.



## 12. What Happens Next?

Because the rabbit calicivirus has been accidentally released, the disease is now spreading across South Australia. It has been known to travel about 500 km in a year. State Governments are considering releasing the virus all over Australia at the same time. If this happens this summer, then many dead rabbits will be seen in Central Australia very soon.

This fact sheet has been prepared by the Land Management Unit of the Pitjantjatjara Council Resource Centre in Alice Springs, so everyone on the Pitjantjatjara, Ngaanyatjara and Yankunytjatjara lands will know what is happening. If further information is required about Rabbit Calicivirus Disease, please contact the Resource Centre (tel. 08-89505413).

The information used in this fact sheet was supplied through the Department of Primary Industries and Fisheries in Alice Springs.

**If dead or sick rabbits are seen around Communities or Homelands, please contact the Department of Primary Industries and Fisheries in Alice Springs. tel. 08-89518111 or fax. 08-89518112.**