

## **BIOSECURITY OF FIJI (BAF) AND MINISTRY OF HEALTH AND MEDICAL SERVICES (MOHMS) ARE WORKING TOGETHER IN ADDRESSING THE RECENT OUTBREAK OF LEPTOSPIROSIS**

### **Leptospirosis in Animals and its Impact on Humans**

#### **WHAT IS LEPTOSPIROSIS?**

Leptospirosis is a zoonotic disease which means that it can be spread from animals to people. Leptospirosis is a disease caused by bacteria called *Leptospira*. There are many strains of *Leptospira* bacteria that can cause diseases.

#### **WHICH ANIMALS CAN GET LEPTOSPIROSIS?**

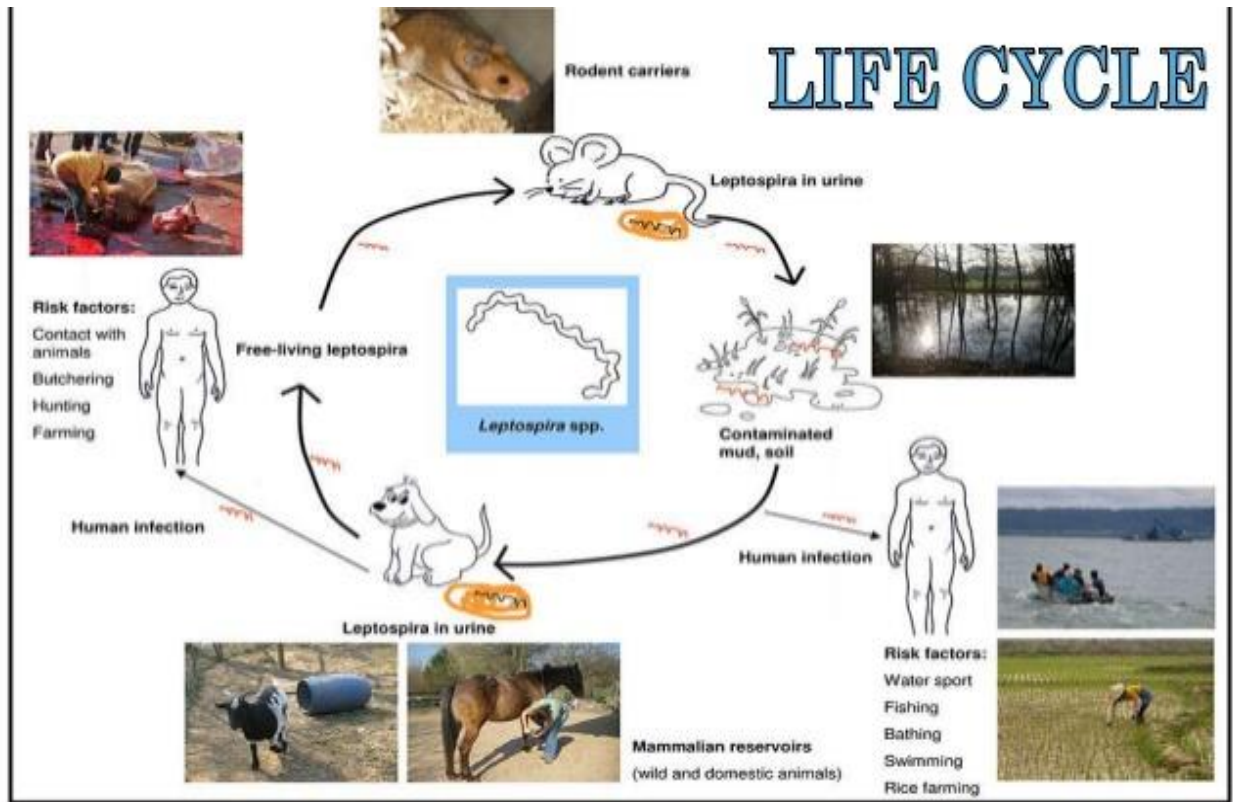
Many domestic and wild animals can carry the *Leptospira* bacteria in their kidneys. These animals can also act as a source of infection to other animals as well as human beings.

Cattles, horses, sheeps, goats, pigs, dogs, mongooses and rodents (rats, etc.) are common reservoirs of *Leptospira* which are shed in their urine. Rodents were the first recognised carriers of leptospirosis. Rodents are the only major animal species that can shed *Leptospira* throughout their lifetime without clinical signs. Most of the time, animals that are natural hosts to a particular *Leptospira* strain do not usually show clinical symptoms or show only a few symptoms after infection with that strain.

Some signs and symptoms of animals infected are reproductive problems, such as abortion and low fertility in cattle and pigs, bleeding resulting in death can be suffered by calves and piglets, reddened eyelids in horses, Dogs may suffer from a chronic disease leading to kidney damage coupled with fever, vomiting, abdominal pain, diarrhea, weakness, refusal to eat, depression and stiffness. Again, it is important to understand that some infected animals may show no signs of illness at all. It is still important to use proper sanitation and hygiene measures.

## HOW CAN ANIMALS GET LEPTOSPIROSIS?

Leptospirosis is transmitted either directly between animals or indirectly through the environment. Leptospirosis is usually spread through the urine of infected animals and once it gets into the water or soil it can survive there for weeks to months. Animals become infected when they come into direct contact with this contaminated water or soil. The bacteria enters through cuts in the skin or through mucous membranes (eyes, nose or mouth). Animals can also become infected by drinking the contaminated water.



Source: <https://www.picswe.com/pics/infection-leptospirosis-28.html>

## HOW CAN HUMANS GET LEPTOSPIROSIS?

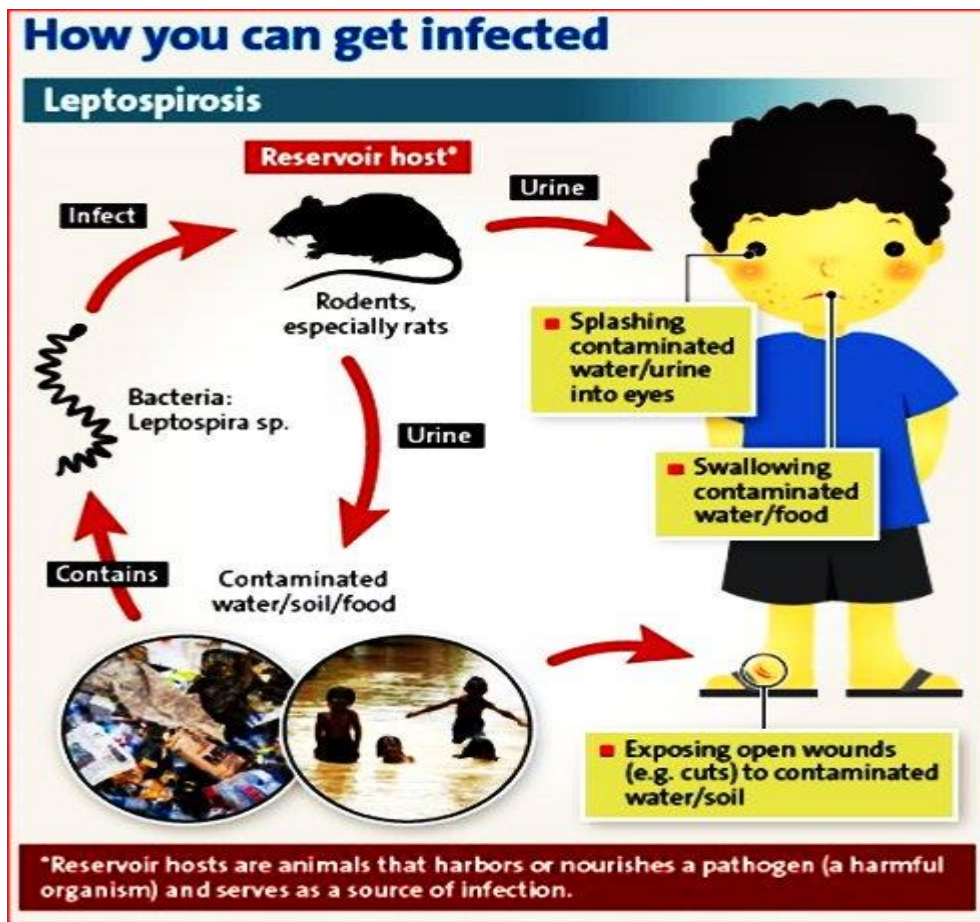
The infection route is through abrasions or cuts in the skin, or through the conjunctiva and mucous membranes. Humans may be infected by direct contact with urine or reproductive fluids from infected animals. Indirect infection can also occur through contact with contaminated water or wet soil or consuming contaminated food or water. Infection rarely occurs through animal bites or human-to-human contact.

Outdoor and agricultural workers (rice-paddy and sugarcane workers for example) and people who are in close contact with animals are more at risk due to their nature of work. Humans can also contract this disease if they swim or wade in contaminated waters. The number of leptospirosis cases may peak during the rainy season and may even reach very high proportions in cases of flooding as the floods cause rodents to move into the city.

People who have high risks of infection:

1. sewage workers;
2. farm and agricultural workers who are in regular contact with animals or infected water or soil;
3. pet shop/ clinic employees and veterinarians;
4. abattoir workers and meat handlers;
5. those involved in recreational water sports, such as sailing or canoeing; and
6. military personnel.

Picture below shows interaction between animals and humans on Leptospirosis



Source: <https://www.picswe.com/pics/infection-leptospirosis-28.html>

## HOW CAN LEPTOSPIROSIS BE PREVENTED?

### Risk of infection is minimised by:



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Contact with animal urine, infected animals or an infected environment. Where appropriate, protective clothing should be worn and wounds covered with waterproof dressings to reduce the chances of infection.



Leptospirosis can be prevented by controlling the reservoir or reducing infection in animal reservoir populations such as dogs or livestock. Additionally, it must keep rodent problems (rats, mice, etc.) under control to prevent the spread Leptospirosis infection.

### In addition to the above, the following measures can be adopted to prevent from the infection:



Always wash your hands after handling your pet or anything that might have your pet's excrement on it.

Encourage people not to leave food around, especially in recreational areas where rats may be present.



The separation of animal reservoirs from human habitations by means of barriers.

Make sure that if your pet is infected, it takes all of its medicine and attend regular follow ups with the veterinarian.



Remove rubbish and keep areas around human habitations clean.





Due to the large number of strains and infection sources and the wide differences in transmission conditions, the control of leptospirosis is complicated and will depend on the local conditions. We do advise that you take all necessary precautions to protect you and your community.

## BAF'S ENGAGEMENT IN LEPTOSPIROSIS

BAF's veterinary team has collected blood samples from pet dogs and tested for leptospirosis with rapid test kits to identify possible carrier animals. The team will carry out screen tests in animal population in risk areas in the upcoming weeks. Moreover BAF is working to establish confirmatory tests for Leptospirosis in animal species.

Picture below shows BAF's Veterinary team conducting tests for Leptospirosis in dogs.



BAF & MoHMS are working together in this leptospirosis outbreak by conducting joint investigation at hotspot areas and joint awareness programmes to the public.

## WHO SHOULD I CONTACT, IF I SUSPECT LEPTOSPIROSIS?

If you think your pet may have Leptospirosis, contact your veterinarian immediately.

In humans, go to your nearest health center or hospital – it is important to seek medical advice.

### For Further Information Please Contact:

Biosecurity Authority of Fiji on 3312512 or Animal Disease Surveillance-5997 or email-[info@baf.com.fj](mailto:info@baf.com.fj) or visit BAF website [www.baf.com.fj](http://www.baf.com.fj)

