Discovery

Scientists are keen to eradicate lepto

New Zealand scientists are passionate about their part in world-leading research into the debilitating disease, leptospirosis.

Researchers looking into the impacts on people and animals of leptospirosis, from left, Dr Julie Collins-Emerson, Professor Peter Wilson, Professor Cord Heuer, Dr Jackie Benschop from the Institute of Veterinary, Animal and Biomedical Sciences at Massey University.

MENTION the disease leptospirosis (or lepto) in a rural community in New Zealand and someone will know someone who's had it.

Leptospirosis can be found in most countries and in New Zealand it is usually seen in people who work with farm animals. "You need multiple approaches to control and diagnose lepto," says Massey University scientist Dr Jackie Benschop.

Leptospirosis can most commonly be found in countries with a warm, moist climate and internationally is associated with rodents, poverty and flooding. There was an increase in leptospirosis in lambs in the Manawatu after the floods in February 2004 for example, she says.

"Weather can create a lepto-outbreak situation particularly with changes in climate. Combine flooding and warmth and some strains of the bug will thrive. Some strains don't survive long but others, when it's warm and wet, can last for a lot longer. We may see a spike in lepto in Northland with all the recent flooding issues there.

"From a scientific point of view it is a fascinating disease ... multi strains, multi hosts, a huge environmental component, we can vaccinate animals for certain strains, there are issues with diagnostic tests. There is a lot going on and we're very passionate about it."

Benschop is one of an internationally-recognised team at the University's Institute of Veterinary, Animal and Biomedical Sciences – a world research leader in leptospirosis disease and diagnosis in both animals and humans.

The team is headed by four academics – Dr Benschop, Dr Julie Collins-Emerson and Professors Cord Heuer and Peter Wilson.

There were 108 notified cases of leptospirosis in New Zealand in 2012 and 58 last year of which about half end up in hospital. Many more become sick with flu-like symptoms and do not go to the doctor.

In fact, the estimated total number of cases in New Zealand is thought to be about 43 times higher that than the notified cases given the numbers that aren't reported (they recovered without medical intervention), misdiagnoses or issues with the accuracy of lab testing.

About half of the notified cases were farmers. Leptospirosis is a disease from a bacteria or bug that sheep, cattle, pigs and deer carry in their urine.

Humans can catch it from contact with the urine of infected animals if that person has cuts or abrasions in that area or the urine is splashed into their eyes or mouth.

Good personal hygiene is one way to limit the likelihood of catching leptospirosis, as well as wearing protective gear, controlling rodents and by vaccinating animals.

A video series has been designed and produced to give farmers information to protect themselves, their families, workers and livestock from the disease. Managed by PhD student Mirjam Guesgen, It includes information about vaccination, how leptospirosis affects livestock and how it can affect people. The videos can be found on the Massey University You Tube website. The launch of the series was part of a presentation at the Rural Women New Zealand annual conference.

Rural Women is an active member of the Farmers Leptospirosis Action Group (FLAG) alongside the Deer Farmers' Association, Beef + Lamb New Zealand, Federated Farmers and the New Zealand Veterinary Association. The group is funded by the Government's Sustainable Farming Fund, Agmardt and industry stakeholders.

Letterb

HAWKE'S Bay farmer Cregoe remembers eve tiny detail of the week h husband Phil contracte leptospirosis and is adama without a flyer that arrived in t mailbox the previous week s would have lost him.

Phil and Jo Cregoe boug 704ha sheep and beef proper Hafton Farm at Waiwhare on t Napier-Taihape road, in 1999 a went on to win the Hawke's B Farmer of the Year title in 200 But that all changed in the sprin of 2009.

A Massey University fly warning farmers of the sympton of leptospirosis had caught Jo attention in a pile of mail. Litt did she know how important th tea break reading was going to b

Leptospirosis bugs like wet a warm conditions and Phil ha been mustering down in a gor on a hot afternoon. He says it w an ordinary day on the farm for fit, healthy farmer.

"I was out shifting stock. I w good-as one minute and then was really crook."

He took himself home wit what he thought was the flu – h flushes followed by the shiver and headaches that just ke

The imp

CATCHING and treatin leptospirosis early lessens th long-term impact of the diseas but that's not as easy as it sound says Wairoa GP Dr Ron Janes.

Some doctors may not think leptospirosis, especially those i cities, but rural doctors wit nearby meatworks tend to b more aware of the diagnosis.

"From a clinical point of vie leptospirosis is important to ou area as we have many meat workers, and as a supply town fo the surrounding farming distric we also have many at-ris farmers.

"In my experience I have see