

# Current status of bovine TB/zTB & Brucellosis New Caledonia

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## Bovine /Zoonotic Tuberculosis

**Animal Health:** since deliberation N°154/ 1998 and decree n° 2020-1225 the List of notifiable animal diseases in New Caledonia is collected every 6 months. Bovine tuberculosis is one of these diseases and must be declared for all domestic and wild mammals

Infection par le complexe <i>Mycobacterium tuberculosis</i>	Bactérie <i>Mycobacterium bovis</i> , <i>tuberculosis</i> et <i>caprae</i>	Tous les mammifères domestiques et sauvages	La vaccination est interdite
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General animal health survey in 1984: Intradermal tuberculin test, necropsy, culture : no identification of *M. bovis*, *M. avium*. Since this survey, no evidence of symptoms on bovine, equine, porcine. Surveillance is based on findings on slaughter and hunting animals (deer, wild boar).

**Human Health:** *M. tuberculosis* is a notifiable disease since deliberation n° 423/2008 and decree n° 2009-1273 : Since 2016, the annual incidence rate

Article 1er : La liste des maladies qui doivent faire l'objet d'une transmission obligatoire de données individuelles prévue par l'article 3 de la délibération n° 423 du 26 novembre 2008 susvisée est la suivante :

**- Tuberculose.** of tuberculosis remains below 15 new cases per 100,000 inhabitants

## DIAGNOSIS, SURVEILLANCE, CONTROL

No positive result / No control plan .

Surveillance on symptoms (differential diagnosis): Histology/ Ziel coloration. Human lab. cooperation: PCR and culture.

Border Protection: animals must be imported from TB free-countries: very few importations of live animals, a long time ago from Australia.

Importation of genetic material is preferred.

### ONE HEALTH APPROACH

**Human TB :** situation 2022 Screening activity

In 2022, 2,143 samples for tuberculosis diagnosis have been processed (compared to 2,372 in 2021). In total, 32 cases of tuberculosis diseases are reported in 2022 based on the start date of treatment, an increase of 14% compared to 2021 (29 cases). Also 6 tuberculosis-infections are declared over the same period . *M. bovis* in a human infection has been reported in May 2024 in French Guyana although cattle are tested and free from TB.

The proportion of men (59%) is higher than that of women.

Among the 32 cases of tuberculosis disease, those over 60 y.o are the most affected, all sexes combined, with an incidence rate of 35.5 per 100,000 inhabitants. The incidence rate of tuberculosis in 2022 is 12 new cases per 100,000 residents. This rate seems to have stabilized over the last 6 years

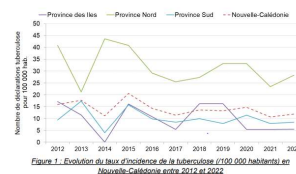


Figure 1 : Evolution du taux d'incidence de la tuberculose (100 000 habitants) en Nouvelle-Calédonie entre 2012 et 2022

## CHALLENGES AND WAY FORWARD

### HUMAN TB:

\*The number of incident cases among those who are under 20 years old remains high; (over 25/100 000)

\*Resistance to anti-tuberculosis drugs

In 2022, out of 28 strains studied, sensitivity was tested for four antibiotics: isoniazid, rifampicin, streptomycin and ethambutol. Results highlight evidence of resistance to isoniazid for 3 strains.

**ANIMAL TB:** The challenge is maintaining the country's disease-free status with strict import rules.

The existence of numerous sensitive wild species could play the role of reservoir.



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## Animal Brucellosis

*Brucellosis, present worldwide, is a notifiable disease in NC like TB.*

Brucellose	Bactérie <i>Brucella abortus</i> , <i>B. melitensis</i> , <i>B. suis</i> , <i>B. canis</i>	Tous mammifères domestiques ou sauvages	Zoonose La vaccination est interdite
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It has never been identified or suspected on animal health outbreaks .  
New Caledonia is free from Brucella.

**Human Health:** also notifiable disease:

No occurrence of human brucellosis in NC (nor import cases)

(Nota bene: swine brucellosis is currently reported in Wallis and Futuna , French territory, and there have been a few cases of human infection with *B. suis*).

## DIAGNOSIS, SURVEILLANCE, CONTROL

Regular survey on blood testing (cattle and pig herds) EAT/FC: 1984, 2003, 2008, 2016 with NO positive result.

Surveillance is based on veterinary investigations on suspicious outbreaks, for example an outbreak of abortions (very obvious in a free Brucella region)

Positive cases would lead to a decree with compulsory health police measures : diagnostic confirmation, epidemiological investigation , eradication with slaughter, destruction of all food products made from infected animals.

Délibération n° 154 du 29 décembre 1998  
relative à la police sanitaire vétérinaire en Nouvelle-Calédonie

Border Protection: certification of animals (including dogs ) from Brucellosis free herds/countries

## ONE HEALTH APPROACH

In case of human brucellosis occurrence, joint working group (vets/human) is created to identify human contacts and possible animal origin

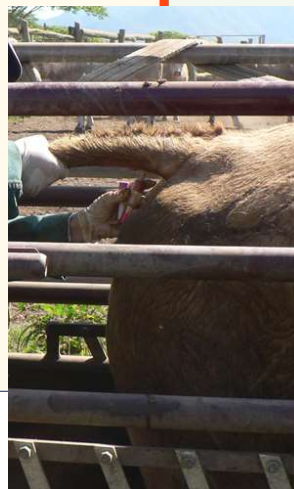
## CHALLENGES AND WAY FORWARD

**Animal Brucellosis :** The challenge is maintaining the country's disease-free status with strict import rules.

- Prepare the contingency plan to activate in case of occurrence: prepare the regulatory texts , the veterinarians'actions through a sanitary mandate, organize traceability in meat production in positive case (withdraw from consumption)

- The existence of numerous sensitive wild species could play the role of reservoir.

Maintain a good One Health relationship to strengthen the responsiveness of the surveillance system and limit the spread among animals



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