



CATTLE

SHEEP

GOATS

PREVALENCE

France & Europe
data 2009–2024

> 50 %

of dairy herds infected
(Europe).¹

73,7 %

of dairy herds infected (Italy,
ELISA).²

62,9 %

of dairy herds infected (France, true
prevalence).³

ECONOMIC

LOSS

Over the lifetime of an
infected animal ^{4,5,6,7}

Dairy **1 558 €**

Suckler **2 629 €**

Dairy **579 €**

Suckler **282 €**

Dairy **1 232 €**

VACCINATION

(France)

Subject to regulation*

By exemption

Unrestricted

By exemption

Vaccination requires an official exemption for cattle and goats, granted subject to confirmed paratuberculosis presence and absence of tuberculosis in the preceding 12 months.¹²

SANITARY AND MEDICAL CONTROL MEASURES

"No curative treatment — only comprehensive herd management works."

DECONTAMINATE

buildings & surroundings

- Cleaning, mucking out and drainage
- Age group separation
- Pasture rotation

PROTECT

young animals

- Colostrum and pathogen-free milk
- Dam/offspring separation

VACCINATE

All animals

As early as possible^{8,9}

Cattle: from 1 month of age

Sheep & Goats: from 2 weeks of age

*Art. 39 (Order of 8 October 2021) ¹² — "By derogation from point b of article 9 of this order, the departmental director responsible for population protection may authorise vaccination against paratuberculosis herds upon written request from the owner or operator, provided that: a) No lesion suggestive of tuberculosis has been found at post-mortem inspection, or at necropsy, in a bovine or caprine from the holding in the preceding twelve months; b) Adequate laboratory tests have demonstrated the existence of the infection with paratuberculosis in the herds."

Years of losses before the first clinical signs.

DISEASE · clinical signs

Onset 2 to 6 years after infection ¹⁰



CATTLE 3 to 6 years

DAIRY

- Chronic projectile diarrhoea with preserved appetite
- Drop in milk yield
- Decline in fertility
- Increased mastitis

SUCKLER

- Diarrhoea and weight loss
- Decline in fertility
- Weak calves
- Oedema



SHEEP 2 to 4 years

DAIRY

- Progressive weight loss with preserved appetite
- Drop in milk yield
- Decline in fertility & prolificacy
- Diarrhoea less frequently observed
- Mortality

SUCKLER

- Cachexia
- Growth retardation
- Reduced wool production
- Mortality



GOATS 2 to 4 years

DAIRY

- Marked weight loss with preserved appetite
- Drop in milk yield
- Decline in fertility & prolificacy
- Intermittent diarrhoea
- Rough coat
- Mortality

DETECTION METHODS

A silent infection

Shedding 2 to 5 years before the first clinical signs.

1 case visible = **up to 25 animals with losses silent infections.** ^{10,11}

SEROLOGY

Blood or milk

ELISA on individual serum or milk / bulk tank. Mass screening in animals.

FAECAL PCR

Individual or pooled

Detection of DNA in faeces, individual or pooled. Confirms shedding. ⁸

ENVIRONMENTAL PCR

Herd

Environmental sampling (slurry/manure). Rapid herd-level screening.

FOR MORE INFORMATION

Contact your veterinarian

The disease



Melchior



REFERENCES

01 Nielsen S.S., Toft N. MAP prevalence in Europe. *Prev Vet Med* 2009;88:1-14.

05 IDELE — Durabilité économique, INOSYS Réseaux 2018-22. Réf 2024.

09 Dhand N.K. et al. Gudair® ovine 10-y study. *Vaccine* 2016;34(42):5107-13.

02 Attili A.R. et al. Ovine paratuberculosis, Marche, Italy. *Vet Med Int* 2011;78:2875.

06 Rasmussen P. et al. Economic losses Johne's. *J Dairy Sci* 2021;104:3123-43.

10 Whitlock R.H., Buergelt C. Ratio 1:25. *Vet Clin North Am* 1996;12(2):345-56.

03 Mercier P. et al. French dairy goat herds. *Vet Rec* 2010;167:412-15.

07 GDS Creuse. Paratuberculosis bovine dossier. Report 2021.

11 Magombedze G. et al. Iceberg phenomenon. *PLoS ONE* 2013;8(10):e76636.

04 Melchior calculation note · 05/2026 · available on request.

08 Corbière F. et al. Silirum® & MAP shedding (FR). *Animals* 2023;13(9):1569.

12 Order of 8 Oct. 2021 (tuberculosis) · art. 39 — DDPP exemption for paratuberculosis.