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The Paratuberculosis Newsletter

The official publication of the International Association for Paratuberculosis

INSIDE THIS ISSUE

Note from the Editor

Dear IAP members,

With the year coming to the end here we have the fourth and last issue of the Paratuberculosis Newsletter in 2025!

We have an active new website! Have you seen it? Information on this on page 3. Also, on this page information on the nomination for the Board of Directors. Be sure to take a look and step forward.

In the Upcoming Events section, dates to be saved from other conferences that can be interesting for paraTB researchers. Important updates on our next ICP in Germany. Only 6 months left for the celebration of our most important event. The abstract submission has been extended (see page 4) and some information on awards has been included (see page 5).

In this issue, again, we are very pleased to have contributions from IAP members. First, Peter Orpin, current Board member with great experience on paratuberculosis control programs that contributes with a comment on the UK Johne´s disease national management control plan (see pages 6-9). Also, we are very lucky to have different IAP members share their experiences on calf to calf transmission. We are sure that contributions on this topic from Ireland (Conor Mc Aloon), the Basque Country (Ramón Juste), and The Netherlands (Maarten Weber) are of great interest for our community (see pages 10-13). Please share findings on this topic from your country so we can publish them in the next issue, March 2026.

Paratuberculosis research advances with over 20 new papers being published since September 2025 (see pages 15-17).

As always, the Association's Officers and Board members are happy to receive suggestions and feedback from you to help strengthen our community. Happy Holidays!

Best wishes,

Natalia Elguezabal

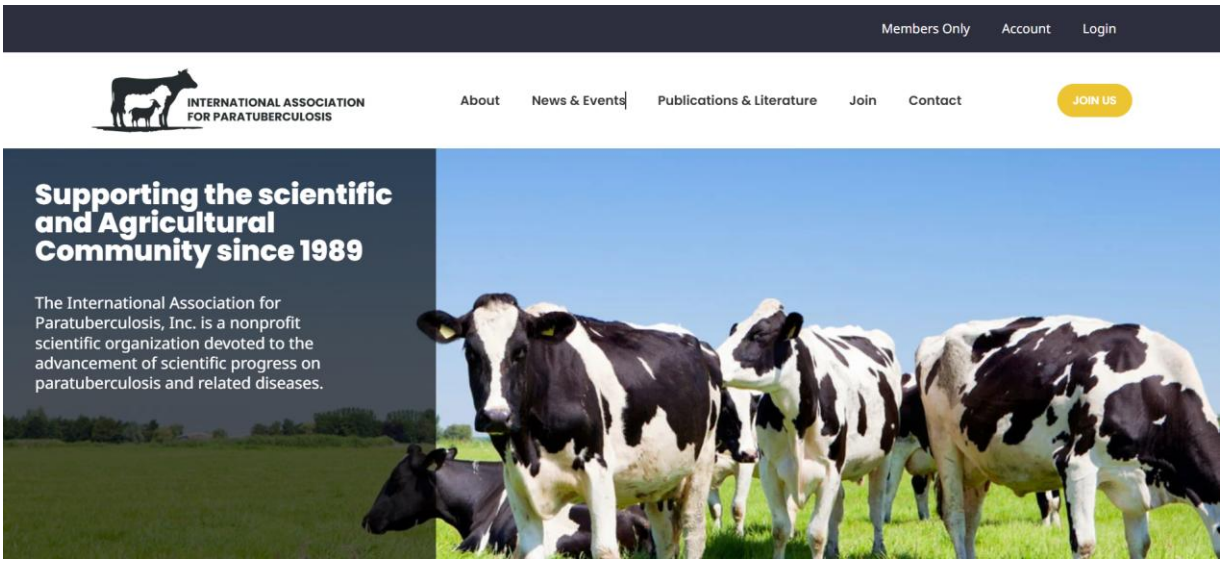
Contribute with your photos

Please share your photographs for publication in the next Newsletter! Let's display the diversity in ruminants, their environments, and where our members are conducting research, science outreach or just having a nice walk.

Please help me! *I'm running out of pictures although you are learning a lot about Basque ruminant breeds.*

Cover photograph by Fernando Lopitz: Latxa blonde face breed sheep grazing in a farm in Mungia, Bizkaia (Basque Country) at dusk.

New IAP website



https://paratuberculosis.com/

The new website has finally been launched thanks to a great effort from the Communication Committee and our secretary-treasurer. Thank you Pete, Alejandra and Adel!

Nominations open for the Board

The Secretary is requesting membership nominations and notice of intent to run for a position on the Board. Candidates will campaign for this position prior to ICP 2026 – the newsletter can serve as a platform for candidates to pitch to all members why they should be elected. Voting by members will take place by sealed ballots provided by Secretary-Treasurer prior to ICP 2026. Members will be appointed to the Board based on the number of votes received until all **4 seats** are filled.

Please contact Adel Taalat (adel.talaat@wisc.edu) if you are interested in nominating a member or notifying him of your intent to run for a position. **The deadline for accepting nomination for Board members is February 7th, 2026.** Keep in mind the next newsletter will be published by March 2026 and we welcome your pitch for publication in that newsletter issue.

Upcoming Events

In the next months many attractive meetings where we can share our advances in paratuberculosis, learn from others, and raise awareness on this disease will be celebrated. Check out this selection.

EAAP-ASAS Conference on Livestock farming and the environment: emissions and solutions. 19-21 April, 2026. Azores Islands, Portugal. (https://asas.eaap.org/).

ASM MICROBE. 4-8 June, 2026. Washigton DC (https://asm.org/events/asm-microbe/home).

ADSA 2026 Annual meeting. 21-24 June, 2026. Milwaukee, Wisconsin. (https://www.adsa.org/Meetings/2026-Annual-Meeting).

33rd WBC. WORLD BUIATRICS CONFERENCE. 6-10 September, 2026. Istanbul, Turkey. (https://www.wbc2026istanbul.com/).

20th VACCINE CONGRESS. 14-16 September, 2026. Seville, Spain. (https://www.elsevier.com/events/conferences/all/vaccine-congress/).

9th European Veterinary Immunology Workshop. 8-10 September, 2027. Florence, Italy. SAVE THE DATE

ICP 2026 Germany

ICP 2026 will be hosted in the city of Dresden, Germany. The meeting will take place from June 7th to 11th, 2026 in the German Hygiene Museum. The colloquim is being organized by Heike Kohler, Karsten Donat and Susanne Eisenberg.

The official conference website (icp2026.com), is active and features updated information regarding keynote speakers, the scientific advisory board, and abstract submission guidelines.

We strongly encourage all prospective participants to subscribe to the **ICP 2026 newsletter** via the website to be informed about this event.

Please note that the deadline for abstract submission has been extended to **January 15th, 2026**.

We hope to see you in Dresden in 2026 for a great scientific gathering!

ICP 2026 Germany. Awards

As in previous editions, the IAP will finance several award categories to attend the 17th ICP. Further details will be available in January 2026, through the official conference website (icp2026.com) and by mailing to the members.

Emeritus Award

The status of Emeritus member of the IAP has the goal of acknowledging the merits of long-standing members that have and that have made significant contributions to the goals of the Association. In order to continue fulfilling this objective for the 17th ICP, the IAP will launch a call for nominations in January 2026.

Richard Merkal Memorial Fellowship

The Association will provide funding for the participation of graduate students to attend the 17th ICP. Selection will be based on potential for future contributions to the field and scientific merit of a submitted abstract. All applicants must be members of the Association or sponsored by a member of the Association. The fellowships will not be open to applicants having residence in the same country in which the Colloquium is being held.

Helping Hand Fellowships

The Association, based on the availability of funds and as determined by the Governing Board, will provide funding for individuals from lower income countries to participate in the 17th ICP. Selection of these individuals will be based on the economic status of the individual's country of origin, a written statement of interest in paratuberculosis, potential for future contributions to the field, and scientific merit of a submitted abstract if one has been submitted (abstract submission is not required).

Why the UK National Johne's Management Plan Worked – Lessons for Global Disease Control

By Pete Orpin

Introduction

Over the past fifteen years, the UK National Johne's Management Plan (NJMP) has become one of the most successful voluntary paratuberculosis health programmes in the world. Johne's disease (JD), once regarded as intractable, has seen national prevalence fall from around 8.5% to 2.7% in UK dairy herds. What makes this especially remarkable is that the NJMP has been largely voluntary, stakeholder-led, and commercially funded, not government driven. The NJMP is a framework not an officially regulated programme. This allowed a very low cost approach to be adopted for the industry. This article explores the reasons behind that success and how the approach could be replicated elsewhere.

1. Commercially led, not bureaucratically imposed

From the outset in 2009, the programme was coordinated through Action Group Johne's – a coalition of milk processors, the British Cattle Veterinary Association (BCVA), National Milk Records and AHDB Dairy. Unlike most national schemes, it was designed around commercial logic rather than statutory obligation. Milk processors and retailers quickly recognised that JD control was both a herd-health and reputational issue, integrating NJMP participation into supply contracts. This created a powerful market-based incentive: 95% of GB dairy farmers who now complete an annual Johne's declaration as part of their milk supply. They are also obligated to record and share their Average Test Value with their milk processor and veterinarian which further incentivizes them to take positive action.

The adoption of low cost testing using milk ELISA tests both for surveillance (30 cow screens of high risk animals) and control (quarterly or binannual whole herd testing) was instrumental to adoption in the early years. The tests are not perfect but if used alongside risk assessments and robust control plan they deliver results.

Key difference: Where other national schemes rely on temporary government or grant funding (e.g. Ireland, Canada, USA), the NJMP embedded JD control as a permanent business expectation within the supply chain.

2. Practising veterinarians at the centre

British Cattle Veterinary Association's (BCVA)training and accreditation of Johne's veterinary advisers was pivotal. BCVA Accredited Johne's Advisors receive ongoing online training in JD control and in return are allowed to remain on the list of approved advisors. Vets were empowered as facilitators of behaviour change, not inspectors. The focus moved from laboratory results to farmer motivation, with practical farm walks, motivational interviewing and risk-based discussions forming the backbone of delivery. Vets were encouraged to utilize risk assessments as an inclusive method of identifying gaps in the control process. The result: JD control became a trusted, routine part of farm veterinary consultancy, improving both technical outcomes and the vet–farmer relationship.

Why the UK National Johne's Management Plan Worked – Lessons for Global Disease Control (continued)

3. Flexible, risk-based strategies
A central principle of the NJMP was choice: every herd could select from six control strategies depending on disease status, resources and aspiration. This flexibility encouraged participation from both low-risk herds seeking protection and high-prevalence herds seeking reduction. The annual review process allowed herds to adjust strategy as progress was made, reinforcing engagement and accountability. The farmer and vet "owned" a shared, agreed control plan that would be practical and achievable for the farmer. A "one size fits all" approach will not achieve widespread adoption. Farmers migrate strategy from for instance Improved farm management and Test and Manage to Test and Cull once prevalence falls.

4. Transparent data and meaningful metrics
The development of the Johne's Tracker and Average Test Value (ATV) transformed the programme from a paper exercise into a measurable system of continuous improvement. The focus on the ATV created a paradigm shift to blocking transmission rather than focusing all efforts on the test positive cows. For the first time, anonymised milk ELISA data from all major recording organisations could be benchmarked nationally. This produced clear, intuitive metrics and, later, the Johne's Control Index (JCI) – a simple target (ATV < 5.5) representing good control and low prevalence. Pursuing a zero prevalence or eradication of disease is not the aim of the NJMP framework.

Effect: data transparency replaced anecdote with evidence, empowering farmers and vets to track progress objectively.

5. Social-science principles embedded in delivery
Farmer engagement research by Morrison, Ritter, Lam and others informed the NJMP's RESET/EESTR model – Create the need, Strengthen beliefs, Provide solutions, supported by Education, Economics, Social norms, Tools and Rules. The Rules were the last element added into the framework 6-10 years after inception. By addressing attitudes, not just actions, the programme tackled the psychological barriers to adoption: disbelief, fatigue, confusion and lack of confidence in testing. In contrast to one-size-fits-all directives, the UK approach used tailored communication and peer learning to sustain motivation over many years.

6. Peer pressure and social norms
When the major processors and retailers made NJMP compliance a supply-chain norm, non-participation became reputationally untenable. This created the momentum and social proof that public funding alone rarely achieves. The combination of commercial expectation, veterinary facilitation and transparent data fostered a culture of pride in JD control – a genuine social movement within the dairy sector.

Why the UK National Johne's Management Plan Worked – Lessons for Global Disease Control (continued)

7. Replicability elsewhere

The NJMP model is transferable, but success depends on four key enablers:
1. Shared commercial purpose among processors, vets and farmers.
2. A trusted coordinating body to maintain standards (e.g. BCVA equivalent).
3. Unified data and testing architecture across milk recording organisations.
4. Behavioural training for veterinarians to ensure empathetic, farm-specific delivery.

Countries with concentrated dairy industries and established farm assurance frameworks could adopt this model readily.

Conclusion

The NJMP demonstrates that national disease control does not require compulsion or subsidy to succeed. It works because it integrates sound epidemiology, commercial reality, behavioural insight and professional credibility into one coherent framework. As one farmer put it: "It's not about ticking boxes – it's about doing the right thing for our cows, our milk, and our customers." The next challenge is to extend these principles – transparent data, trusted veterinary advice, and social-science-based engagement – to other endemic diseases where progress has stalled.

Keywords: Johne's disease, NJMP, MyHealthyHerd, behaviour change, data transparency, paratuberculosis control, veterinary engagement.

Author bio: Peter Orpin is a veterinary consultant, Director of MyHealthyHerd, and Chair of the Technical Group of Action Group Johne's. He has led the development of the UK National Johne's Management Plan utilizing the skills of a team of stakeholders (Dairy UK, National Milk Records, Cattle Information Services, Myhealthyherd, Panlivestock, Agricultural and Horticultural Development Board). Particular thanks to Dick Sibley, Peter Dawson, Karen Bond, Emma Holt, James Hanks, Nick Taylor, Jannette Mathie, Lyndon Edwards who have been central to the success of the Action Group Johne's.

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Calf to calf transmission: different experiences across the world

For this number some JD researchers across the world were targeted and asked to share their experience on "calf to calf transmisión" in aproximately 300 words based on experience in their región or country. Here the contributions on or related to this topic that have been prepared for this issue.

Ireland

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Although already demonstrated in the Netherlands several years prior, this issue really came to our attention thanks to the work from the Barkema and De Buck groups at the University of Calgary in the mid 2010s.

It was a particular concern for us in Ireland given the dairying system we operate here which is described as a hybrid pasture-based, seasonal calving dairy system. This system, we thought, presented unique opportunities for increased calf-to-calf MAP transmission. For our dairy herds, a key target is to have 90% of the herd calving within 6 weeks, with replacement heifers sourced from the beginning of this period [1]. Since calving occurs indoors, this effectively results in increased exposure for calves to pen mates who could be shedding MAP. In addition, in recent years, two important changes have occurred which further increase this risk: firstly, herd fertility has improved significantly, the seasonal peak in calvings is now more compact resulting in more similar aged calves being managed together; and secondly, Ireland has had the fastest expanding dairy herd in Europe resulting in increased herd sizes with associated increased use of automation for calf feeding, resulting in larger calf group sizes. Some recent work has been carried out here with the objective of evaluating a novel environmental sampling protocol for measurement of MAP contamination of the calf environment on infected farms [2]. This work showed that across 28 infected farms, 46% had detectable MAP in the calf environment, with 21% of farms having detectable MAP in the pre-weaned calf area. The sample size in this study was modest and the authors noted that further work on a larger sample size would be required to draw more solid conclusions. Notwithstanding these caveats, these results suggest that elevated calf to calf MAP transmission is of particular concern on Irish dairy farms.

1. Mulkerrins, M., Beecher, M., McAloon, C.G., Macken-Walsh, Á., Implementation of compact calving at the farm level: A qualitative analysis of farmers operating pasture-based dairy systems in Ireland, Journal of Dairy Science, Volume 105, Issue 7, 2022, Pages 5822-5835,

2. Field, N. L., Mee, J. F., & McAloon, C. G. (2023). Evaluation of Environmental Sampling for Detection of *Mycobacterium avium* subspecies *paratuberculosis* in the Pre-Weaned Calf Area and Calving Area of Infected Dairy Farms Enrolled in a Voluntary Johne's Disease Control Programme. *Animals*, *13*(4), 669.

Calf to calf transmission: different experiences across the world (continued)

Basque Country (Spain)

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The generally accepted route of transmission is the oral-fecal assuming that dissemination is caused by clinical and subclinical infected adults through fecal shedding and that acquisition occurs via contaminated materials ingested by calves in their early weeks of life.

To test this hypothesis, we used the results of a 15-year control program on 28 farms of the Basque Country accounting to more than 8000 individuals of all ages yearly tested both by fecal PCR (FPCR) and serum ELISA according to two strategies: testing and culling in 7 farms and vaccination of replacer calves in the other 21. Age at sampling was grouped by year except for animals older than 10 years that were grouped in a single category. From the 10th year onwards only one farm in the non-vaccinated group had an animal shedding in the 12th yearly follow-up. All age groups except those younger than one year had positive results both in FPCR and ELISA in the first yearly testing before applying any measures. Initial prevalence was roughly similar in all age groups ranging between 5.3% in the older than 9-10 years animals and 16.1% in those between 5 and 6 years with FPCR and 1.1% in 1-2 years old and 14.3% in the 4-5 years old group with ELISA. FPCR detected the highest prevalence at 5 years of age, while ELISA reached the maximum at 4. Vaccination prevented shedding in the 1 year old animals after the second year of control, while T&C cleared this group only after the sixth. No shedding was observed in older that 8 years animals in the vaccinated group after the fourth yearly control, while it took up to the 7th year to have all older than 7 years to become definitely negative. This was the same with ELISA. FPCR (12.1%) detected about 10 times more positives than ELISA (1.1%) in the 1 one year old heifers. This figure was larger than those of animals older than 6 years, **suggesting a more relevant than expected epidemiological role of young infected animals in MAP dissemination** that, on the other hand, went undetected by ELISA. Replacement with offspring of old MAP-clean cows might be an inexpensive way of MAP control. Vaccination was compatible with FPCR detection and substantially decreased shedding between 3 and 6 years of age.

Calf to calf transmission: different experiences across the world (continued)

The Netherlands

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Observed shedding of *Mycobacterium avium* subsp. *paratuberculosis* in Dutch young stock

Previous work showed that up to 20% of female Holstein-Frisian cattle in Dutch dairy herds started shedding *Mycobacterium avium* subsp. *paratuberculosis* (Map) before two years of age [1]. However, following enrolment of most Dutch dairy herds in the Milk Quality Assurance Programme for paratuberculosis (MQAP) between 2006 and 2010, the apparent prevalence of adult cattle testing positive has decreased considerably [2]. The present study therefore aimed to quantify the proportion of Map shedders in individual faecal samples submitted routinely to our laboratory between May 2023 and November 2025.
Samples were tested using a commercially available extraction method (AB MagMAX™Total Nucleic Acid Isolation Kit, ThermoFisher Scientific, Waltham, MA, USA) followed by a commercial PCR assay (ID Gene™ Paratuberculosis Duplex PCR, Innovative Diagnostics, Grabels, France). Reason for testing was not recorded at sample submission. Age at sample submission was derived from the National Cattle Identification and Registration database.

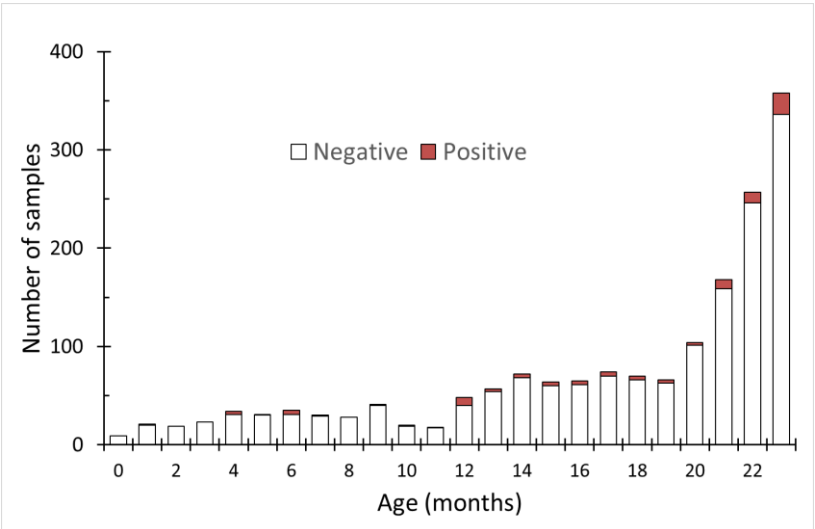

Figure 1. Map PCR results of 1712 individual faecal samples from 1,642 young stock in 631 Dutch cattle herds submitted between May 2023 and November 2025 to Royal GD.

Calf to calf transmission: different experiences across the world (continued)

During the study period, 1,712 individual faecal samples from 1,642 young stock (<24 months old) in 631 herds were analysed (Fig. 1). Of these 1,712 samples, 92 (5.4%) samples from 88 animals in 63 herds were PCR-positive. Of samples collected from cattle under 12 months of age, 4.2% were PCR-positive, including 1.0% heavy shedders (Ct≤31), no intermediate shedders (31<Ct≤35) and 3.2% light shedders (35<Ct≤38). The youngest heavy shedder was 31 days old. Of samples collected from cattle aged 12 to 24 months, 5.6% were PCR-positive, including 0.4% heavy, 0.9% intermediate and 4.3% light shedders.
Despite the considerable progress achieved in the MQAP, our results indicate that a substantial proportion of tested young stock were shedding Map. Consequently, the presence of infectious young stock continues to be a major concern in the control of paratuberculosis.

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What about calf to calf transmission in your hands?
Do you have data you would like to share with the IAP community?

Please, prepare your contribution and send it to: newsletter@paratuberculosis.com; nelguezabal@neiker.eus.

Are there other important topics that you think we should cover?

Please, let us know.

Officers of the Association

President: Antonio Facciuolo

Vice-President: Natalia Elguezabal

Secretary-Treasurer: Adel Talaat

Board Members: Alejandra Colombattii, Sam Strain, Peter Orpin, Ramón Juste

Past-President: Conor McAloon

Contribute to the Next Newsletter

The next newsletter will be published in March 2026.

We invite all members to contribute by sharing opinion pieces, news about recent publications or project updates, regional control programs, job opportunities, or any relevant information on paratuberculosis research and communications presented at meetings.

Please submit your article to:

newsletter@paratuberculosis.com; nelguezabal@neiker.eus

Submission deadline for the upcoming issue is February 28th, 2026.

We welcome all submissions!

Some of the images included in this issue have been generated with Leonardo AI (LAI) and ChatGPT (CGPT).

Recent Literature on MAP

Research papers focused on *Mycobacterium avium* subsp. *paratuberculosis* published during the past three months have been included in the following list.

Links to the open access versions of the papers have been included in the titles when possible.

Enjoy reading!

Dhillon A, Yadav P, Singh SV, Ranjan R, Gupta S, Sawal RK, Singh M, Ranjan A, Nath K. Comparative diagnostic evaluation and molecular typing of Mycobacterium avium subsp. **Paratuberculosis** in dromedary camels of Rajasthan, India. Vet Res Commun. 2025 Sep 19;49(6):317. doi: 10.1007/s11259-025-10891-w.

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Royo M, Elguezábal N, Arrazuria R, Benavides J, Fernández M. Effect of **paratuberculosis** vaccination before and after oral experimental infection with Mycobacterium avium subspecies **paratuberculosis** in goats. Vet Q. 2025 Dec;45(1):2566363. doi: 10.1080/01652176.2025.2566363

Recent Literature on MAP (continued)

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The Officers and Board wish all IAP members Happy Holidays.

Remember to have a nice break from work! Happy New Year!

See you back for our next issue in March.