



In this CVERA e-zine, we provide a brief overview of some of the recent work conducted by CVERA staff in collaboration with a wide range of national and international institutions. More in-depth information can be found at <http://www.ucd.ie/cvera/>, noting the role of CVERA to provide high quality independent scientific research and advice to support national evidence-based policy-making in animal health & welfare and public health and related matters.

**Vacancy for the roll of Full Professor / Professor of Veterinary Epidemiology and Risk Analysis in the UCD School of Veterinary Medicine (Permanent)**

University College Dublin invites applications for the position of Full Professor/ Professor of Veterinary Epidemiology and Risk Analysis in the UCD School of Veterinary Medicine. The postholder will also serve as Director of the Centre for Veterinary Epidemiology and Risk Analysis. The new Professor will be an international leader in veterinary epidemiology, with a commitment to scientific quality, independence, transparency, integrity, and interdisciplinary collaboration. The successful candidate will build a vigorous world-class programme of veterinary epidemiological research and training and will be committed to the dissemination of high-impact research outputs. In support of the School Dean, they will provide academic leadership for the development of veterinary epidemiology, support and maintain

excellence in research and teaching, and mentoring support to earlier-career academic colleagues. The new Professor will also serve as the CVERA Director, with responsibility for leadership and management of this Centre, and (with the independent CVERA Management Board) also its overall strategic direction and governance. The successful candidate will bring energy and ambition, and a clear vision for the Centre, so that it is best placed to undertake scientific research and support, and to provide robust and timely scientific advice into the future, in alignment with the current and future needs of key stakeholders, including DAFM and AHI. They will provide an inclusive and empathic leadership style within the Centre, with an emphasis on capacity-building and collaboration. There are substantial opportunities for Centre expansion, through further national and international collaboration and additional competitive research funding. The successful candidate will be committed to public good research, ideally with prior experience

working at the science-policy interface. Scientific communication with key stakeholders, including farmers, is an important aspect of the role. The successful candidate will have a primary veterinary degree and a PhD in veterinary epidemiology. If you would like more information or details on how to apply for the role, please visit <https://www.ucd.ie/workatucd/jobs/> (job ref. 017346) (closing date 28 June 2024 @ 12.00 noon).

### **Vacancy for the roll of Research Veterinary Epidemiologist in the UCD School of Veterinary Medicine (Temporary 3 years)**

CVERA is currently seeking to hire a Research Veterinary Epidemiologist to join our research team. The successful candidate will lead and manage epidemiological research studies across the full project lifecycle, from project design through to scientific publication. They will provide specialist expertise to the design, planning, analysis and publication of epidemiological studies as well as providing general veterinary advice in support of projects led or managed by CVERA Colleagues. The successful candidate will have a primary veterinary degree and a PhD in veterinary epidemiology. If you would like more information or details on how to apply for the role, please visit <https://www.ucd.ie/workatucd/jobs/> (job ref. 017348) (closing date 17 June 2024 @ 12.00 noon).

### **An epidemiological investigation into the reasons for high bovine tuberculosis incidence in cattle herds of the Burren, Ireland, prior to 2020**

This study investigated why cattle herds in The Burren in Co. Clare often suffered from high rates of bovine TB infection prior to 2021 (bTB rates have improved considerably since then, as a result of concerted efforts from stakeholders). The authors found little evidence that this was because of factors usually held responsible for high TB prevalence, such a large herd sizes, high numbers of cattle movements, or badgers. However, herds with a history of bTB were often situated in areas of higher than average rainfall and, though not large by national standards, were typically larger than the average for the Burren. This paper was led by Jamie Tratalos in CVERA in collaboration with colleagues from the Department of Agriculture, Food and the Marine. The paper will shortly be published in *The Irish Veterinary Journal* (in press). <https://irishvetjournal.biomedcentral.com/>

### **Estimation of sensitivity and specificity of bulk tank milk PCR and 2 antibody ELISA tests for herd-level diagnosis of *Mycoplasma bovis* infection using Bayesian latent class analysis**

Mycoplasmosis (due to infection with *Mycoplasma bovis*) is a serious disease of beef and dairy cattle, with adverse impacts on health, welfare and productivity. A robust and reliable laboratory test for surveillance is important both for herd-level prevention and control. The objective of this study was to estimate the sensitivity and specificity of 3 diagnostic tests (one PCR and 2 ELISA tests) on bulk

tank milk, for the herd-level detection of *M. bovis*. In total, 728 herds were included in the study. Bulk milk samples were collected in autumn 2018, as part of routine surveillance conducted by the laboratory service of the Department of Agriculture, Food and the Marine, and tested using a Bio-X ELISA, an IDvet ELISA and a PCR test. A Bayesian latent class analysis was conducted to estimate the sensitivity (Se) and specificity (Sp) of these tests applied to bulk tank milk (BTM) for the detection of the herd-level infection. Across the 3 models used in the analysis, an estimated 38% to 65% of Irish dairy herds were infected with *M. bovis*. The operating characteristics vary substantially between tests, with the IDvet ELISA having a relatively high Se (the highest of the 3 tests studied). This test may be appropriate for

herd-level screening or prevalence estimation within the context of the endemically infected Irish dairy cattle population. Further work is required to optimize this test and its interpretation when applied at herd-level to offset concerns related to the lower than optimal test Sp. This study was led by Catherine McAloon in the UCD School of Veterinary Medicine in collaboration with colleagues from the UCD CVERA, Animal Health Ireland, and the Department of Agriculture, Food and the Marine. The paper is Published in the *Journal of Dairy Science* (in press). <https://doi.org/10.3168/jds.2023-24590>

This e-zine, and recent news items, can be found at: <http://www.ucd.ie/cvera/news/>

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