

Draft Concept Note

WOAH Regional Training Workshop on Brucellosis Diagnosis

5-8 August 2025, Beijing, China P.R.

Jointly with the Institute of Veterinary Drug Control (IVDC), Ministry of Agriculture and Rural Affairs of the People's Republic of China

1. Background:

Brucellosis is a neglected zoonotic disease of economic importance that is endemic in most of the lower and middle-income countries in the world including the Asia Pacific (AP) region. Important species affecting food animals include *Brucella abortus* in cattle, *B. melitensis* in small ruminants, and *B. suis* in pigs. Besides being an occupational hazard for people working with animals such as livestock farmers, veterinarians, abattoir workers, laboratory workers through direct contact, the disease can be transmitted indirectly to humans via consumption of non-pasteurised milk, and milk products. Brucellosis can result in economic losses in terms of reduced production due to infertility, abortions, decreased milk production, and costs for prevention, control, and elimination. WOA's world animal health information system (WAHIS) report for 2023 showed that nine Members in the AP region officially reported the disease to be present in animals. A study in India in 2015 showed the disease caused a loss of US \$ 3.4 billion in total of which losses in cattle and buffalo industries accounted for 95.6% of the total losses. Human brucellosis is one of the commonest zoonoses reported worldwide with estimated annual cases up to 500,000. Another study in India in 2018 showed an estimated annual median loss of about US \$ 10.46 million and a loss of 177,601 disability adjusted life years (DALYs) at the rate of 0.15 DALYs per thousand persons per year. Likewise, the disease continues to result in significant economic losses in livestock production and human health costs in other countries in the Asia Pacific Region. In Indonesia, a study in 2018 reported that brucellosis resulted in loss of up to 1.8% of the total value of livestock assets. Besides domestic animals, the disease has been reported in wild animals such as camels, Asian badgers, Himalayan marmots, and blue sheep although the role of wildlife in the disease epidemiology is still not clearly understood. A few countries have also reported changes in the dominance of *Brucella* species such as *B. melitensis* dominating over *B. abortus*. In several workshops/meetings organised by WOA, including the Tripartite-led zoonoses workshops (multisectoral coordination mechanisms), many countries have identified brucellosis as a priority disease.

The WOA Regional Representation for Asia and the Pacific (WOAH RRAP) supported by the WOA Reference Laboratories for Brucellosis in China and Thailand organised the [OIE Webinar on Progress and Challenges in Brucellosis Control in the Asia Pacific Region](#) in 2021 wherein key updates and challenges in brucellosis control were discussed. This was followed by the "Virtual Workshop on Brucellosis Control in the Asia Pacific Region" organised jointly by WOA RRAP, WOA Collaborating Centre for Food Safety, Rakuno Gakuen University, Japan, and WOA Reference Laboratories for Brucellosis based in Thailand, Republic of Korea and Italy. At the recently organised [Workshop on Zoonotic Tuberculosis and Brucellosis Control in the Asia Pacific Region](#) held in Qingdao, China P.R. in September 2024, countries again voiced the need to enhance their laboratory diagnostic capacity for diagnosis of brucellosis to enhance surveillance and understand the true burden of animal brucellosis.

These workshops recommended that WOAHA and its Reference Laboratories continue to engage Members in understanding the progress, gaps, and challenges faced in brucellosis control in the region so that appropriate support may be provided to countries.

Therefore, WOAHA RRAP in collaboration with the Institute of Veterinary Drug Control (IVDC) which is the WOAHA Reference Laboratory for Brucellosis at Beijing in China P.R. will organise the WOAHA Regional Training Workshop on Brucellosis Diagnosis to be held at Beijing, China P.R. on 5-8 August 2025. This hands-on laboratory training will provide the latest knowledge and skills in the use of diagnostic tests recommended by WOAHA for the routine diagnosis and surveillance of animal brucellosis. A one-day International Academic Conference on Brucellosis, to be held on 5th August, will precede the hands-on training.

2. Objectives:

The training workshop will be held with the following objectives:

- **Share latest updates** on the disease situation, prevention and control, and research findings on brucellosis.
- **Enhance laboratory diagnostic capacity** for brucellosis in countries.
- **Improve brucellosis surveillance** capabilities on the ground, leading to enhanced disease detection, reporting, and control.
- **Enhanced understanding of burden** of brucellosis in the region.
- **Foster networking and coordination** among brucellosis diagnostic laboratories within the region.

This training aims to empower participants with the knowledge, skills, and networks necessary to advance brucellosis diagnosis, surveillance, and control efforts across the Asia Pacific Region.

3. Trainees

Laboratory technicians/veterinarians working on animal brucellosis diagnosis at the national/sub-national laboratories of brucellosis-endemic and high-risk countries will be the target participants for the training course. Young mid-level professionals in endemic countries actively working in the field of brucella diagnosis would be encouraged to be nominated for the training.

For the one-day seminar on 5th August, an expert each from three brucellosis-free countries will be invited to attend (in-person from Japan and virtually from Australia and New Zealand) to share their country experiences in disease elimination and maintenance of disease freedom.

4. Trainers

Experts from the WOAHA Reference Laboratory for brucellosis at IVDC in Beijing will impart the training.

5. Date, duration, and training Venue

While the one-day seminar/conference will be held at Grand Metropark Longxi Conference Center Beijing, the 3-day hands-on training will be held at IVDC, Beijing, China P.R. The one-day International Academic Conference on Brucellosis on 5 August will be led by IVDC and the WOAHA-funded trainees, expert and staff will participate and present at the conference.



6. Organisers

The training will be organised by the following agencies:

- WOAHO Regional Representation for Asia and the Pacific, Tokyo (WOAH RRAP)
- Institute of Veterinary Drugs Control (IVDC), MARA, China P.R.

7. Training topics and format

The training will be conducted in person through a combination of seminars and hands-on practice of diagnostic tests at IVDC as per the training agenda. Trainees may be required to prepare and present on the brucellosis diagnostic situation in their respective countries.

8. Invitations/visa

WOAH RRAP will send initial invitations to the WOAHO Delegates of Members in the region to make nominations as per prescribed criteria. We will ask Members to nominate ONE participant from the Veterinary Services who should be a laboratory technician/veterinarian working on animal brucellosis diagnosis at the national/sub-national laboratory. The nominated participant will be required to register for the training using an online link (which will be provided directly to the participant in the acceptance letter). Based on the nominations received and registration completed, the Ministry of Agriculture and Rural Affairs (MARA) will then issue personalised visa facilitation letters to the nominated participants for their visa application.

For the one-day International Academic Conference on Brucellosis on 5th August, WOAHO will send invitations to Delegates of Australia, Japan and New Zealand to nominate an expert who will be invited to make a presentation on country experiences in elimination and maintenance of brucella-free status.

9. Travel and local logistics

WOAH RRAP will make necessary travel arrangements for all WOAHO-funded trainees including economy air tickets and accommodation while IVDC will take care of local logistics such as arranging training venue, training materials, laboratory consumables and local logistics.

10. Language

The seminar and the training will be conducted in English.

11. Funds

Thanks to the generous support of the People's Republic of China, WOAHO RRAP will bear the cost of the training workshop including travel and accommodation expenses for WOAHO funded participants, expert, and WOAHO staff. WOAHO will not be responsible for life/medical/travel insurance of the participants or for costs resulting from any illness, accidents or loss which may occur during travel and/or training attendance.

Donor visibility will be ensured in all training materials.

12. Contact points

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