

Current status of bovine TB/zoonotic TB & Brucellosis [THAILAND]

Regional Workshop on Zoonotic TB and Brucellosis in the Asia Pacific Region Qingdao, 24-26 September 2024

Reka Kanitpun¹, Rotchana Prakotchao², Onpirun Yurachai³, Monaya Ekgatat¹

1) National Institute of Animal Health, DLD, MOAC, 2) Bureau of Disease Control and Veterinary Services, DLD, MOAC, 3) Bureau of Epidemiology, DDC, MOPH,

Bovine TB/Zoonotic TB

CURRENT SITUATION

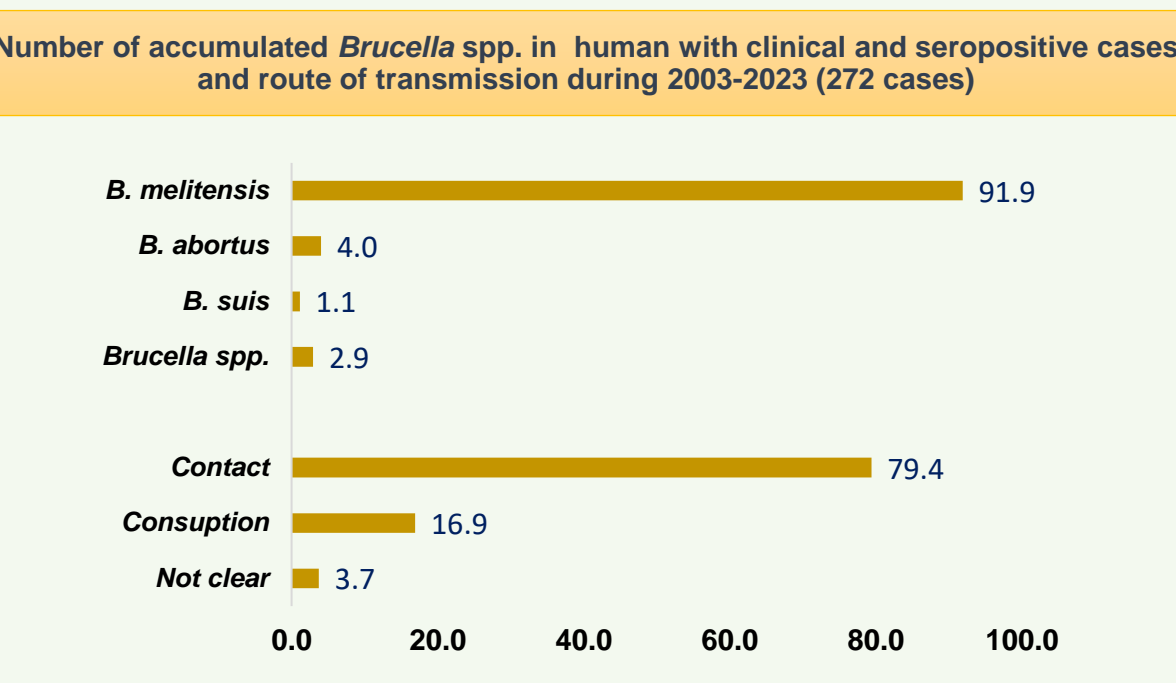
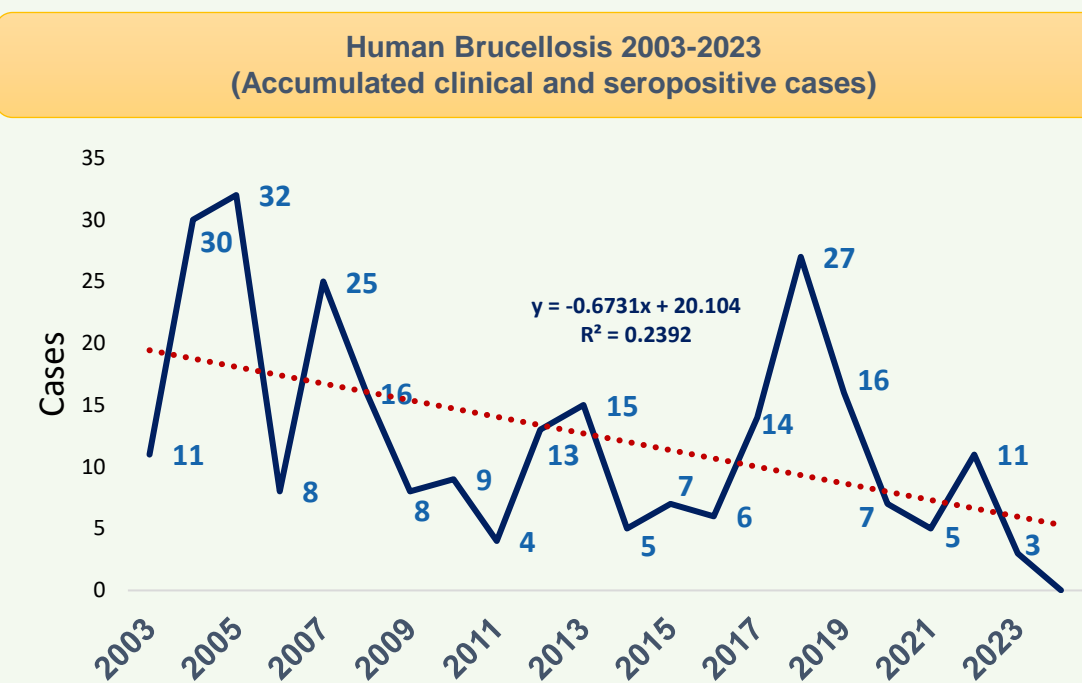
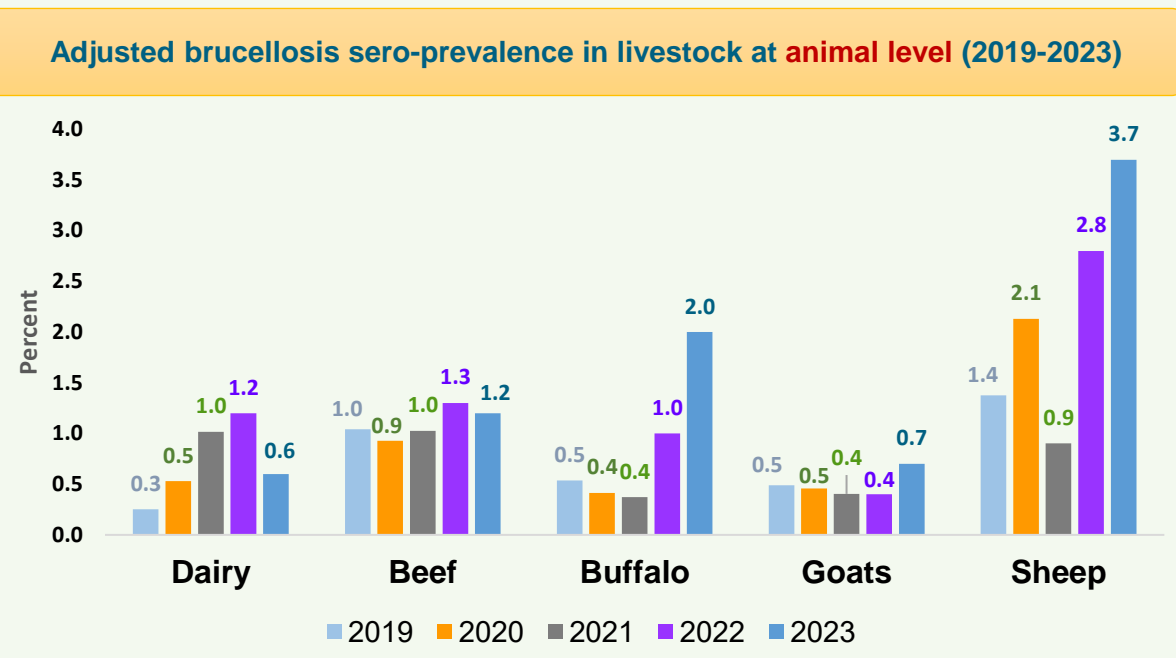
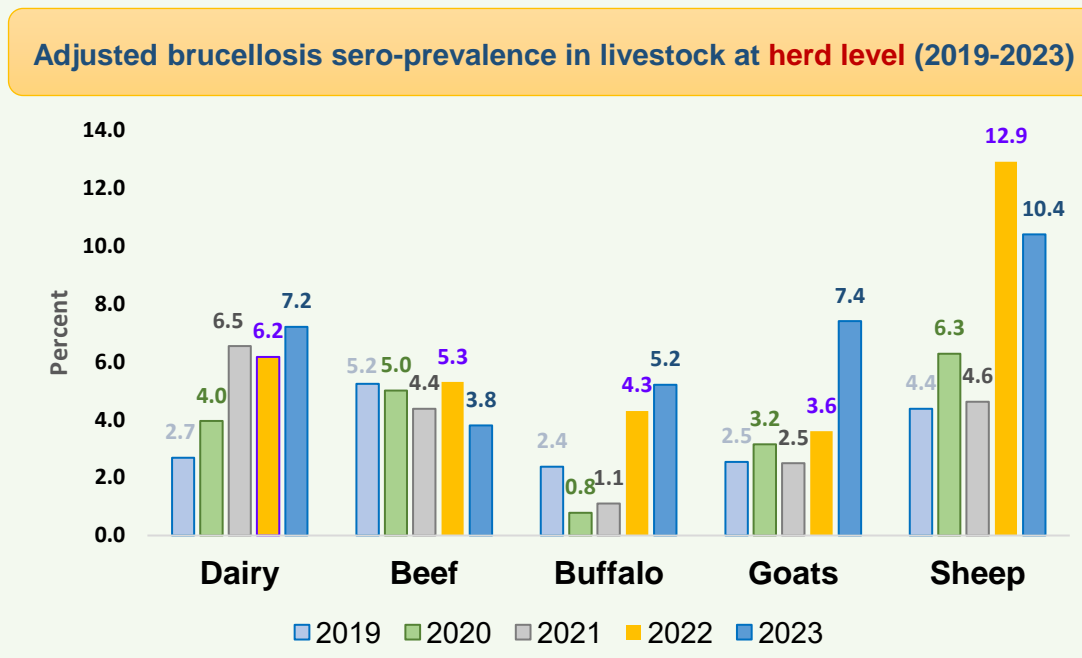
Tuberculosis in dairy cattle during 2012 to 2017 and 2023			
Year	Sample size (n) Head	Positive Head	True Prevalence (95% CI)
2012	87,552	225	0.26 (0.24-0.28)
2013	22,289	2	0.009 (0.003-0.015)
2014	48,540	1	0.002 (0.00-0.004)
2015	23,232	3	0.012 (0.005-0.02)
2016	17,921	0	0
2017	8,727	0	0
2023	62,612	0	0

Tuberculosis profile: Thailand (Population 2022: 72 million) Estimates of TB burden*, 2022		
	Number	(Rate per 100 000 population)
Total TB incidence	111 000 (87 000-138 000)	155 (122-193)
HIV-positive TB incidence	9 200 (6 200-13 000)	13 (8.6-18)
MDR/RR-TB incidence**	2 700 (1 500-3 800)	3.7 (2.1-5.3)
HIV-negative TB mortality	12 000 (9 500-14 000)	16 (13-20)
HIV-positive TB mortality	2 100 (1 400-2 800)	2.9 (2-4)
(WHO: Global Tuberculosis Report 2023)		

- Fiscal year 2023: Treatment success rate 79.8 %, Cohort size 78,955 (Department of Disease Control, MOPH)
- No evidence of *M. bovis* infection in human

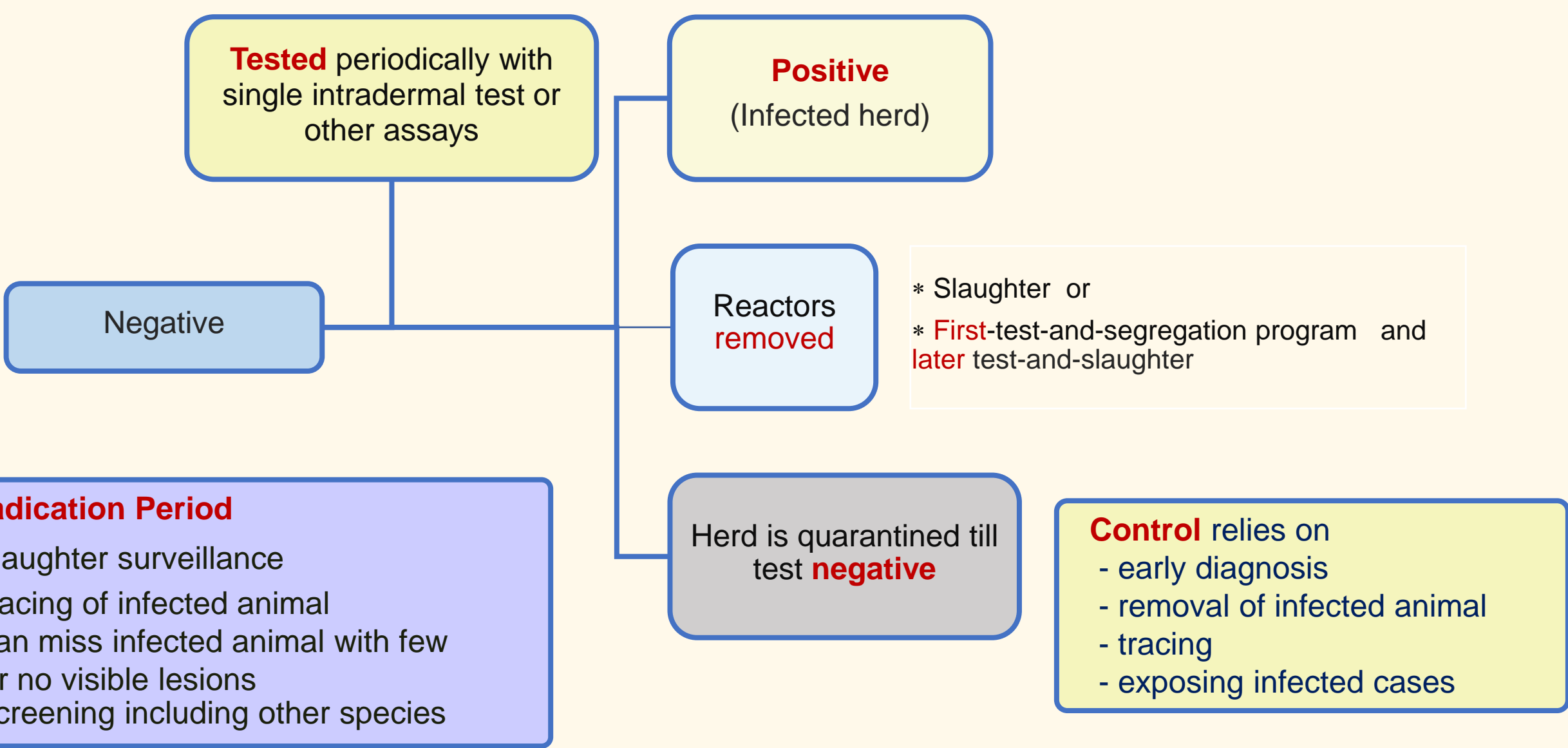
Brucellosis

CURRENT SITUATION

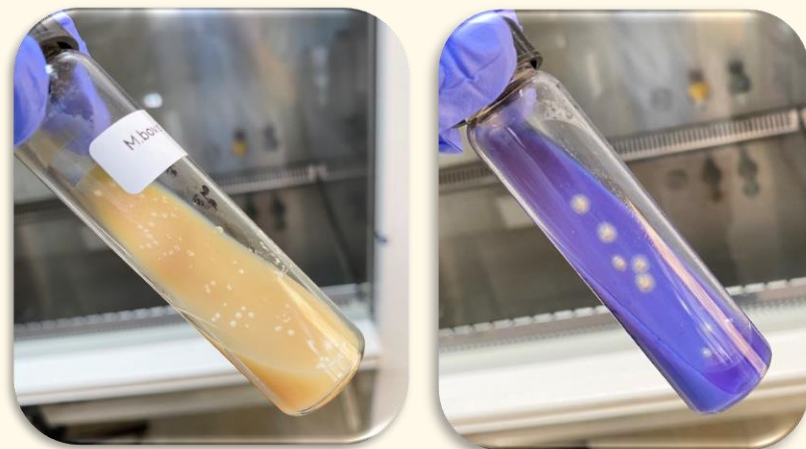


DIAGNOSIS, SURVEILLANCE, CONTROL

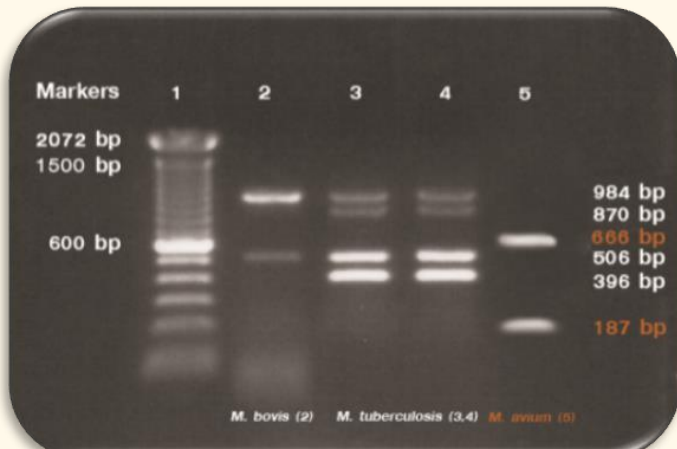
Summary: Prevention and Control



Tuberculin test



Culture from specimens



PCR for differentiation

ONE HEALTH APPROACH

Development of laboratory diagnosis of tuberculosis in cynomolgus macaques, incidence, association of gut microbiomes and whole genome sequences of *Macaca fascicularis* and *Mycobacterium tuberculosis* (Project manager: Angkana Chairasert)

CHALLENGES AND WAY FORWARD

- Surveillance** through sample collection at slaughterhouses
- Emphasizing** the importance of reliable serological testing
- Compensation schemes:** regularly reviewed
- Collaboration:** PH-AH-EH including private sectors

DIAGNOSIS, SURVEILLANCE, CONTROL

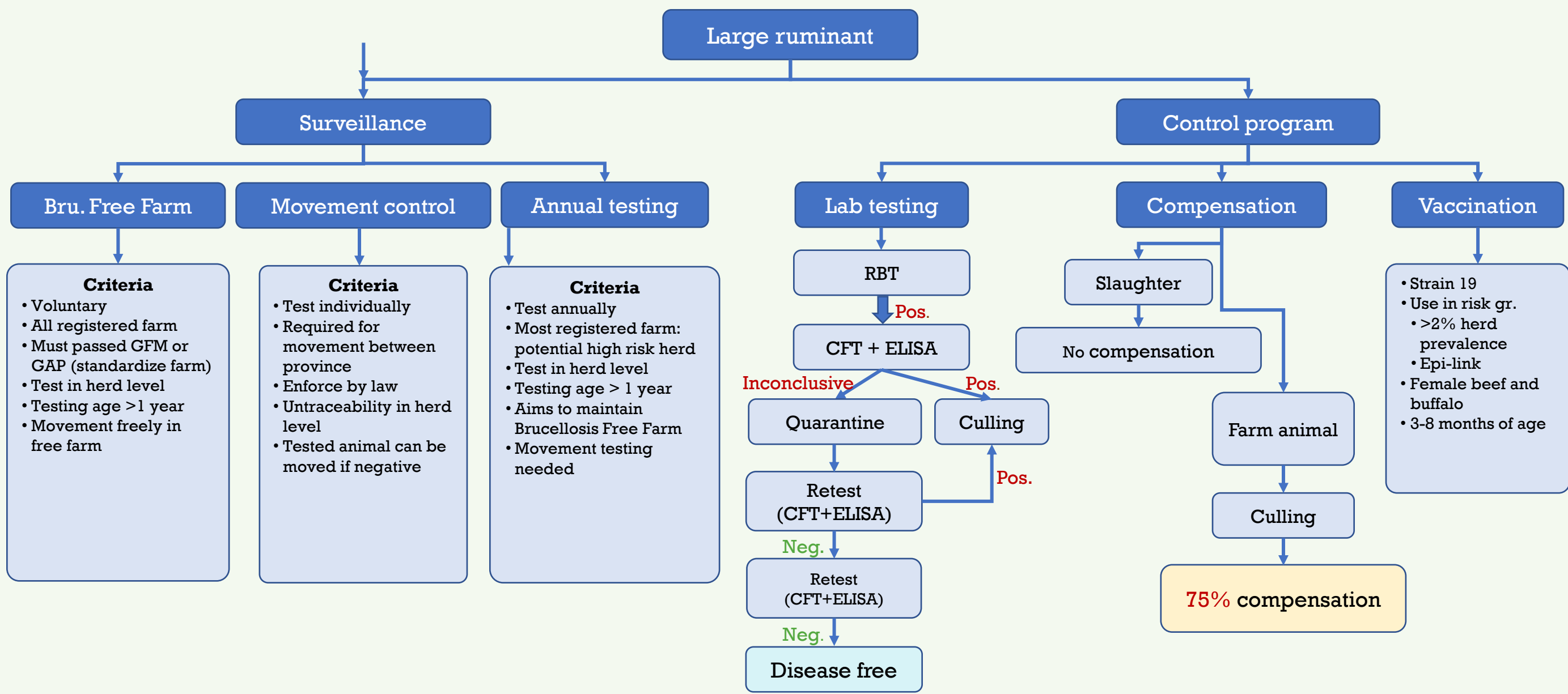
Surveillance

- Annual Prevalence Survey
- surveillance
- Clinical surveillance
- Animal movement

Testing

- Screening test: Rose Bengal test
- Confirmation: CFT and I-ELISA (parallel)

CURRENT ANIMAL BRUCELLOSIS CONTROL PROGRAM IN THAILAND: LARGE RUMINANT



ONE HEALTH APPROACH

Public Health and Animal Health Collaboration

- Shared information of human positive cases/animal positive farms**
- Brucellosis outbreak investigation
- FETP-MOPH supports R-FETPV-DLD
- Brucellosis cases confirmed
- Guideline of good practice for Public Health and Animal Health officer since 2014

CHALLENGES AND WAY FORWARD

- Elimination programme:** based on a strategy that reflects the epidemiology of the disease, farming system, and veterinary infrastructure and be regular reviewed and adapted
- Expanding animal testing:** milk (cattle) surveillance program
- Appropriate guideline:** all relevant epidemiological criteria at national/regional level
- Compensation schemes:** regularly reviewed
- Collaboration:** PH-AH-EH including private sectors



World Organisation
for Animal Health
Founded in 1924



中华人民共和国农业农村部
Ministry of Agriculture and Rural Affairs of the People's Republic of China