World Organisation for Animal Health

中国兽医药品监察所
China Institute of Veterinary Drug Control
国家动物布鲁氏菌病参考实验室
National Reference Laboratory for Animal Brucellosis

Brucellosis in Indonesia : Challenges and Opportunities for Brucellosis Diagnosis, Surveillance and Control

Indonesia

Titis Furi Djatmikowati

Veterinary Laboratory Officer / Veterinarian /

Manager of Bacteriology Laboratory – Maros

Diseases Investigation Centre (DIC)

2nd WOAH Regional Training Workshop on Brucellosis Diagnosis

Beijing, P.R. China, 26 - 29 May 2026

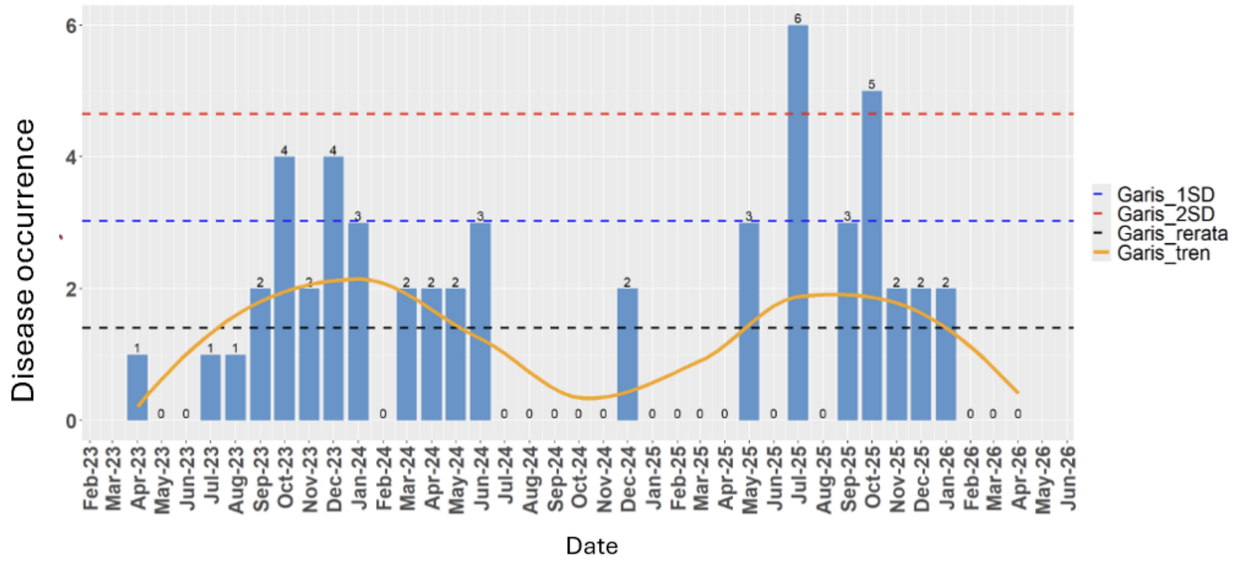
Follow-ups done since last training in August 2025*

- ❑ *National Sharing session*

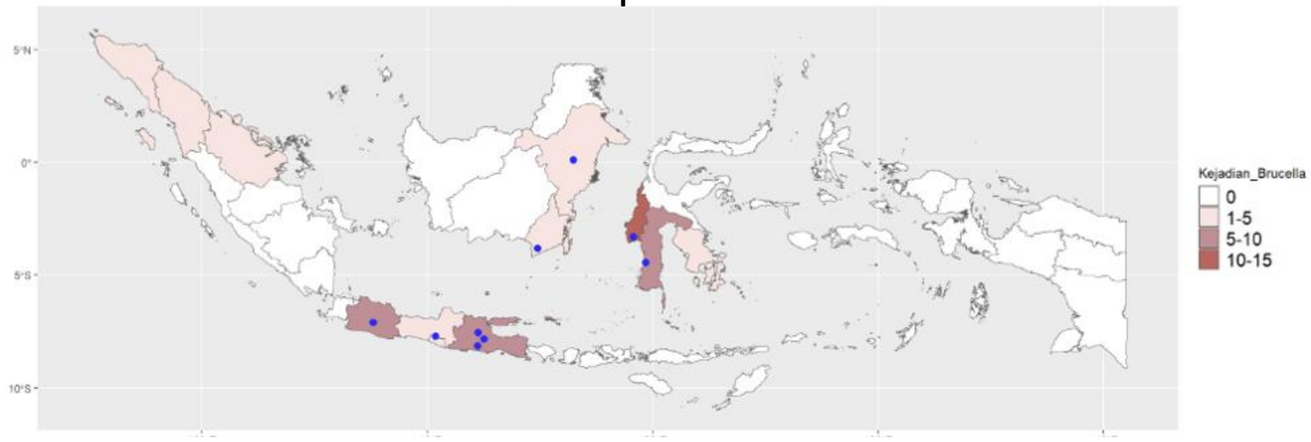
- ❑ *Conduct* on National Brucellosis proficiency testing as Brucellosis national reference laboratory to and part of ISO/ IEC 17043 activities for data analysis

Current disease situation

National Temporal Distribution of Brucellosis from April 2023 to April 2026



National Spatial Distribution of Brucellosis from April 2023 to April 2026



Provinces and Districts Reporting Brucellosis from April 2025 to April 2026

Province	District	Villages	Occurance	Cases
Di Yogyakarta	Sleman	2	2	2
	Bandung	3	3	9
Jawa Timur	Blitar,Jombang,Kota Batu	5	5	23
	Tanah Laut	1	1	7
Kalimantan Timur	Kutai Kartanegara	1	1	1
	Polewali Mandar	6	7	12
Sulawesi Selatan	Barru	4	4	7

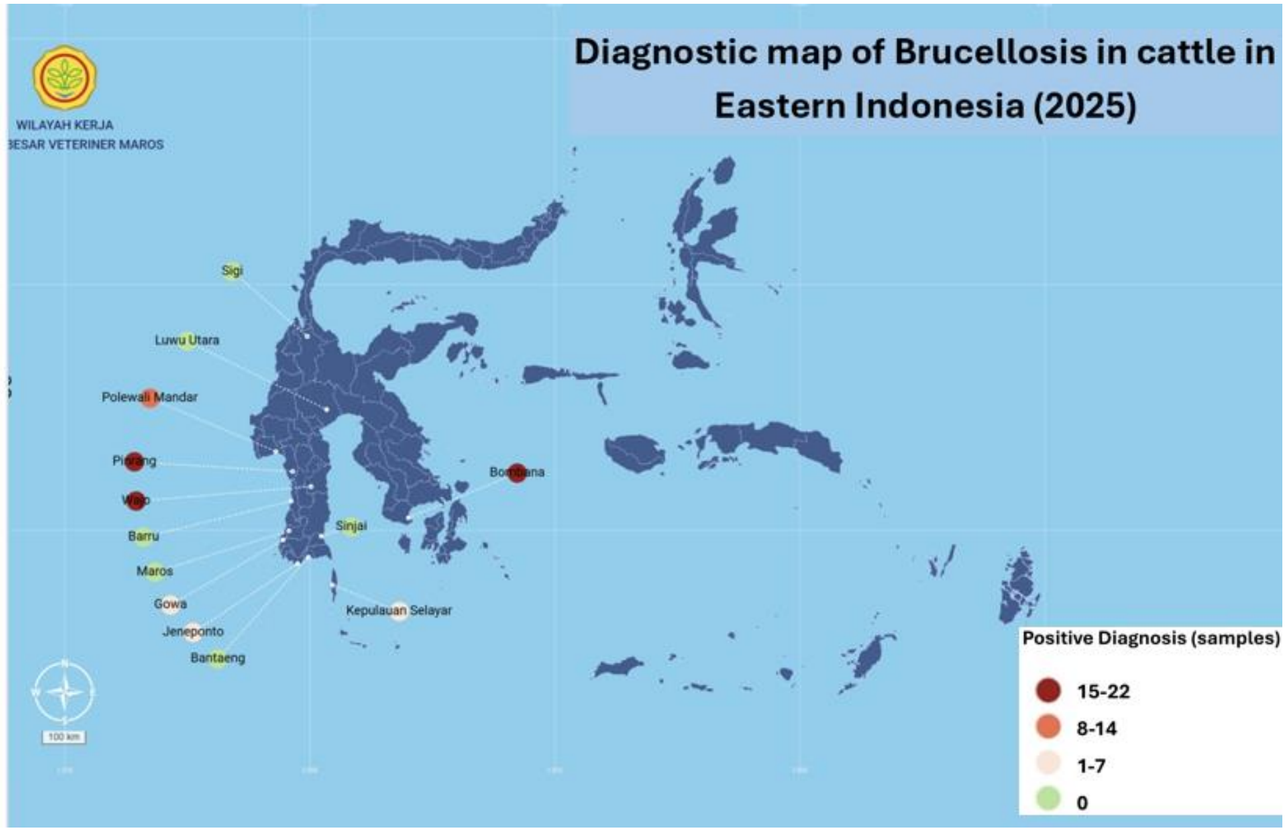
Current disease situation

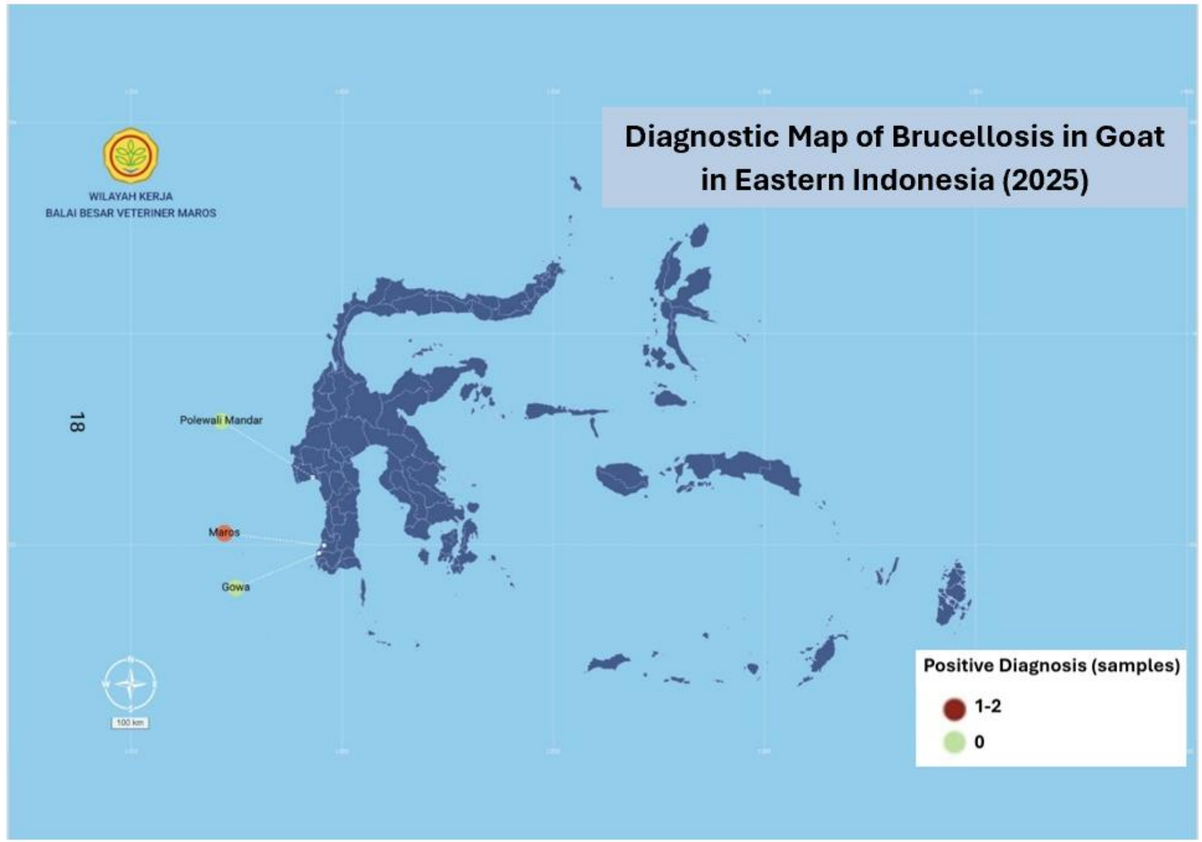
Brucellosis-free region

Bali island
Lombok island (West Nusa Tenggara Province)
Sumbawa island (West Nusa Tenggara Province)
Kalimantan island
Sumatera Barat, Riau, Jambi and Kepulauan Riau
Lampung, Bengkulu, Sumatera Selatan dan Kepulauan Bangka Belitung
Sumba island (East Nusa Tenggara Province)
Madura island (East Jawa Province)
North Sumatera Province
BBPTU-HPT Baturraden

- Current situation of Brucellosis in Indonesia as reported in iSIKHNAS (cattle and goat, 2025)
- Estimated prevalence of brucellosis large and small ruminants on the 2024 meta-analysis study by Ridlo et al. (2024) was 3.25%
- The bacterial species that has been identified is *Brucella abortus*.
- Economic losses had been estimated by Basri et al. (2017) in large ruminants in Indonesia reached IDR 3.6 trillion/year (1.8% of the total livestock asset value in Indonesia)

Current disease situation



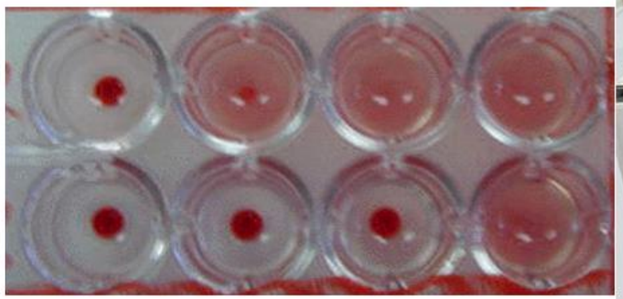


Disease Diagnostics

Serological Test :

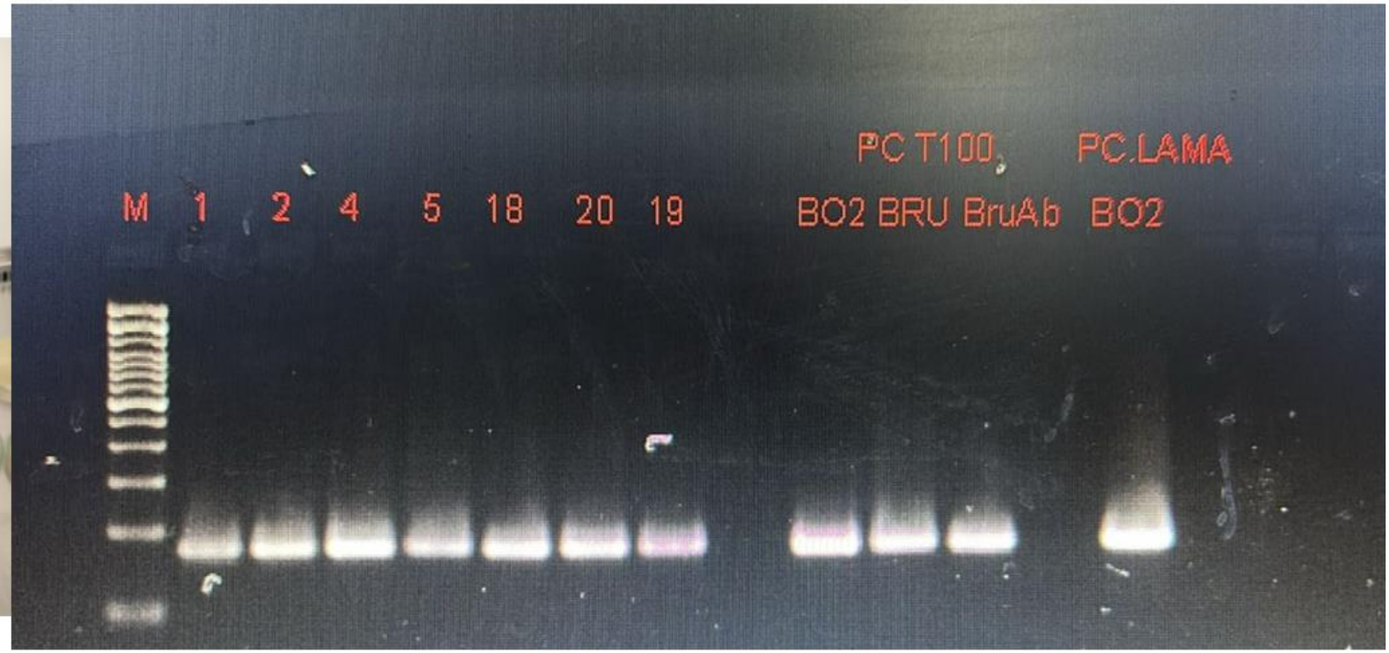
- RBT
- CFT
- iElisa

No	Interpretation	Description
a.		Value 0 (negative), no aglutination
b.		Value 1+, mild agglutination
c.		Value 2+, Moderate agglutination
d.		Value 3+, Complete agglutination



Identification of the agent

- Culture and identification of *Brucella abortus*
- Conventional PCR *Brucella abortus* (Gen ery, BCSP31)



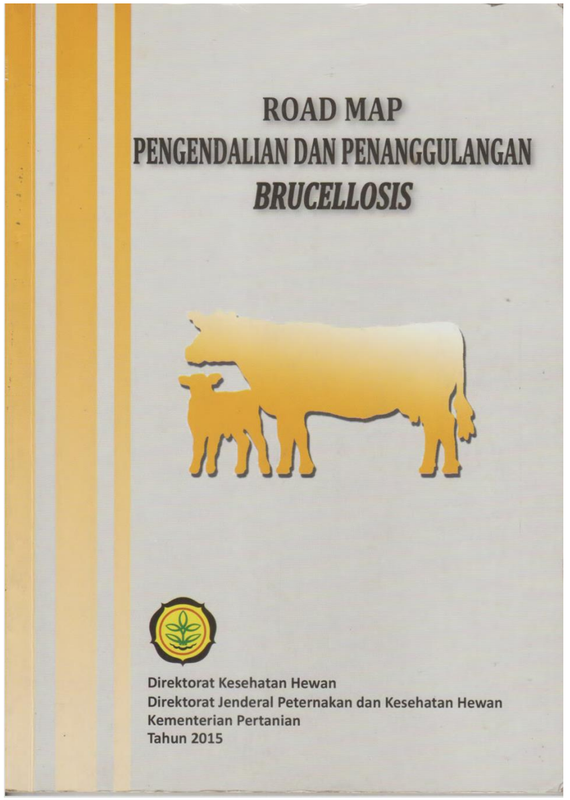
Disease Surveillance

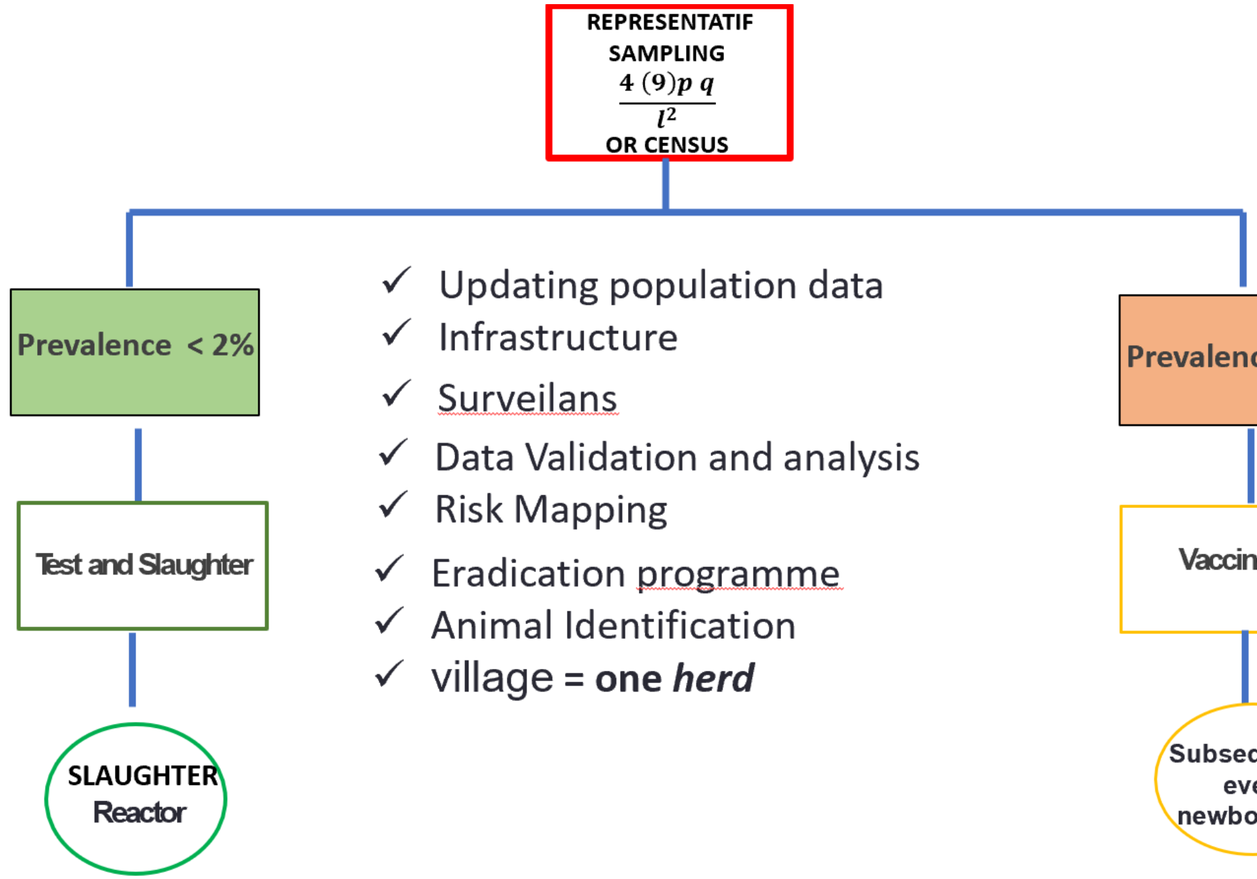
1. Pasive surveillance : reports of disease occurrence form field of animal health
2. Active surveillance : Structured disease survey method

❑ Representative surveillance - to obtain baseline prevalence

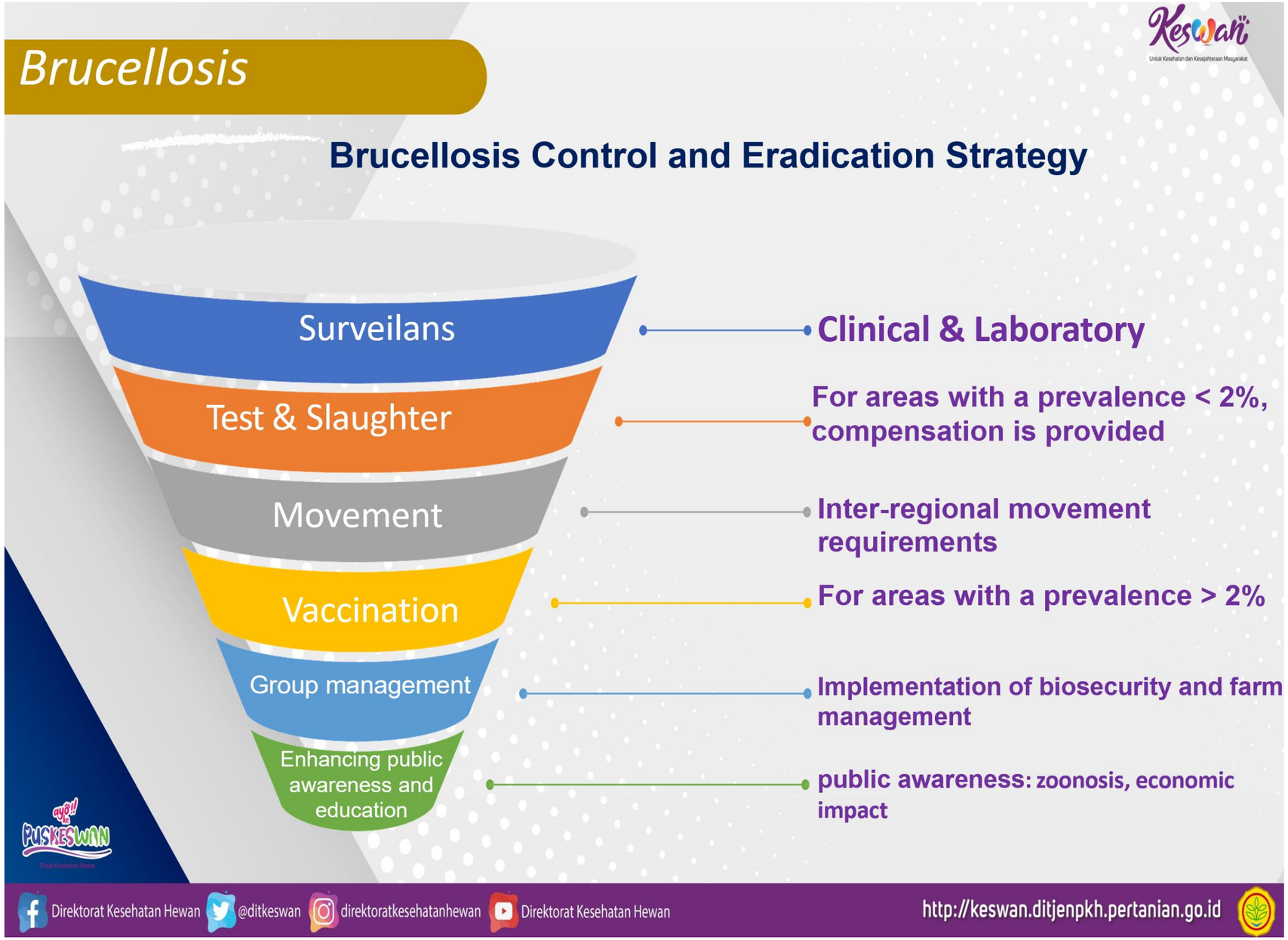
❑ Risk Base surveillance

3. Outbreak/ Case Investigation





Disease Prevention and Control or Preparedness Strategy



Key challenges/issues

1.Changes in disease patterns due to shifting priorities

2. Animal health policies and regulations

3.Insufficient of funding and resources

4.Low public awareness

5. Limitations in vaccination programme

6.Challenging geographical conditions

Way Forward

1. Strengthening our reference laboratory
2. Developing proficiency testing programs for diverse testing methodologies
3. National harmonization of brucellosis diagnostic testing
4. Developing standard reference sera for National Quality Control (NQC).
5. Mapping the molecular epidemiology of brucellosis.
6. Establishing a laboratory twinning programme with a WOAH Reference Laboratory.

Thank you!

WOAH Regional Representation for Asia and the Pacific
Food Science Building 5F - The University of Tokyo
1-1-1 Yayoi, Bunkyo-ku
Tokyo, 113-8657
JAPAN

rr.asia-pacific@woah.org
rr-asia.woah.org

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