

WOAH Strategies for addressing bovine TB in different contexts

Monal Daptardar
Scientific Coordinator

Regional Workshop on Zoonotic
Tuberculosis and Brucellosis
Control in the Asia Pacific



World Organisation
for Animal Health



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



Outline

- **Who we are ?**
- **WOAH as a standard setting organisation**
- **Contribution to zoonotic TB roadmap**
 - **Replacement of the bovine and avian tuberculin**
 - **Alternatives for the control of Bovine TB**
 - **Research coordination – Star-IDAZ**





We work in **5 regions**

Who we are ?

Our global presence



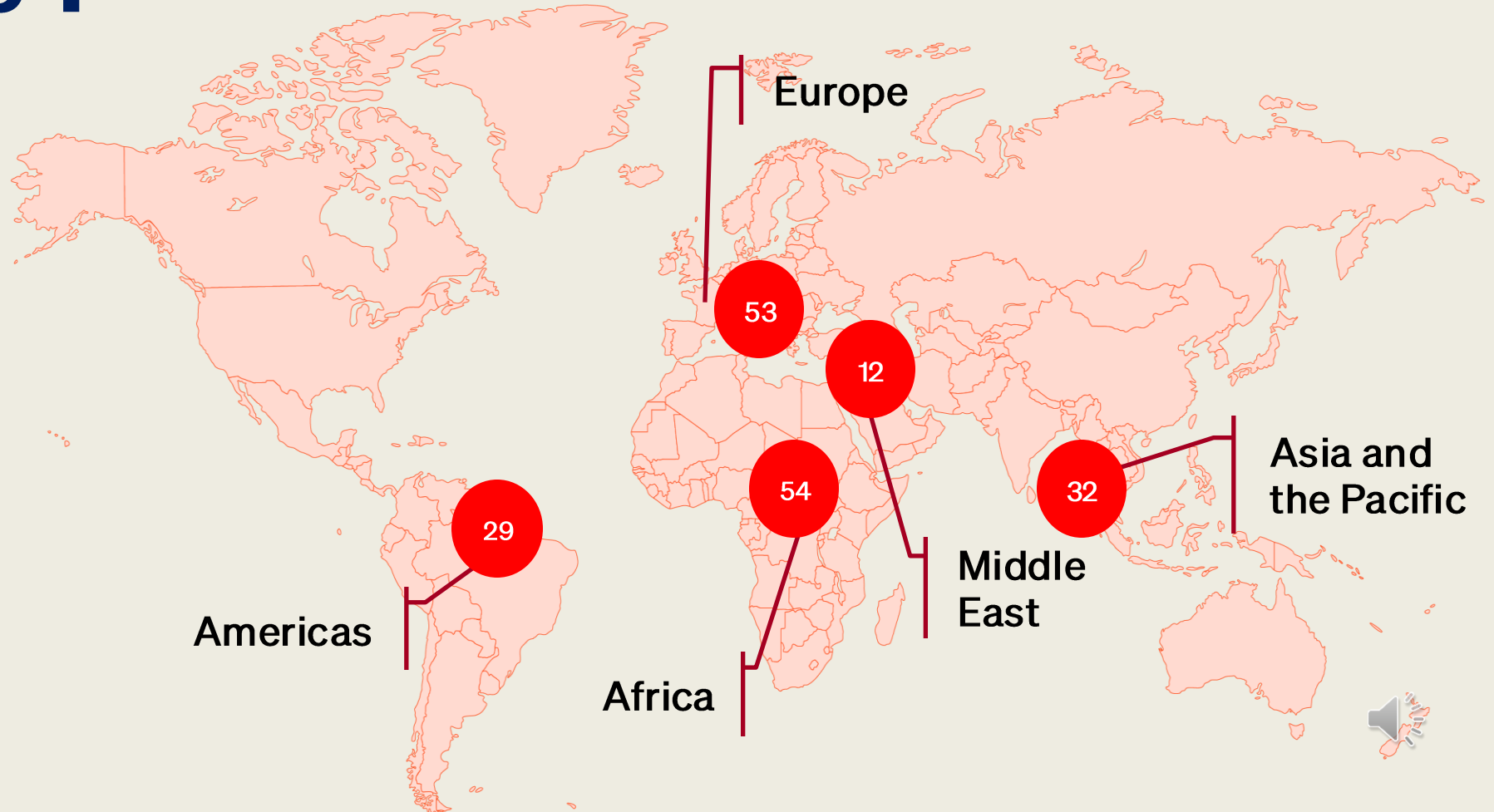
... Regional and subregional representations



We work with **183 countries and territories**, our Members, to protect the health of animals.

Who we are ?

Our global presence





Who we are ? Our network



1

Headquarters
Paris, France



13

Regional and
Sub-Regional
Representations



300+

Reference Centres
of expertise



183

Members

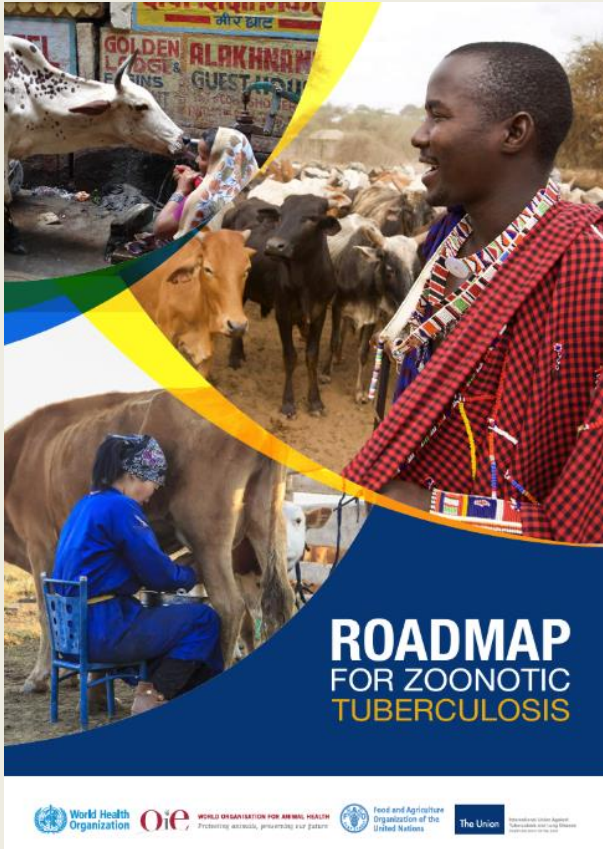


75+

official
partners



WOAH efforts for controlling tuberculosis in animals



1. WOAH as a standard setting organisation
2. Contribution to zoonotic TB roadmap

- Replacement of the bovine and avian tuberculin
- Alternatives for the control of Bovine TB
- Research coordination – Star-IDAZ

3. Challenges and opportunities

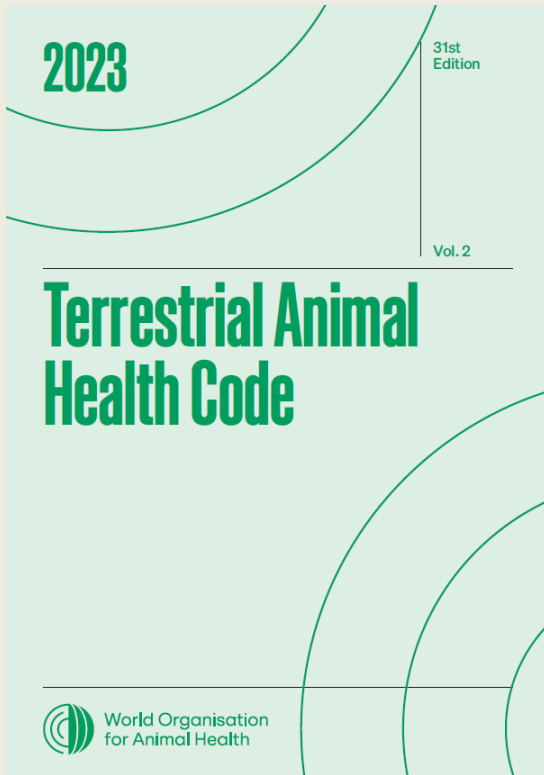


STAR-IDAZ
International Research
Consortium on Animal Health





WOAH as a standard setting organisation



Terrestrial Code

Standards for disease control, surveillance and safe international trade

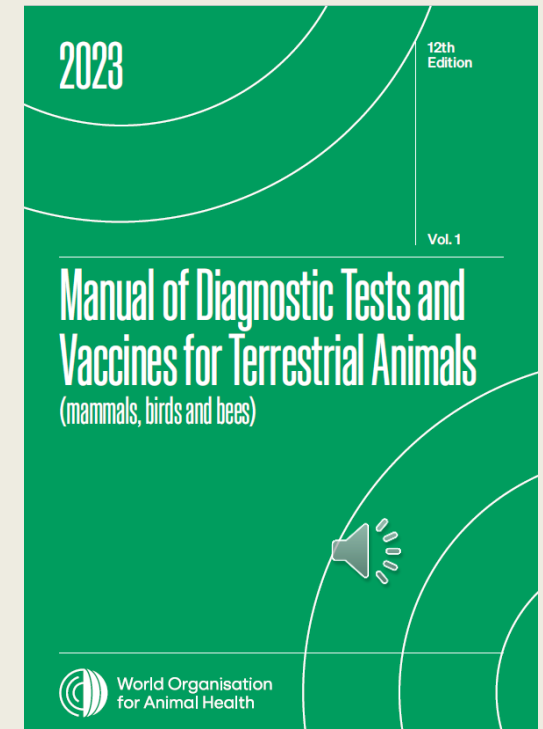
Chapter 8.12. Infection with *Mycobacterium tuberculosis* complex



Manual of Diagnostic Tests and Vaccines for Terrestrial Animals

Standards for laboratory diagnostic and vaccine production

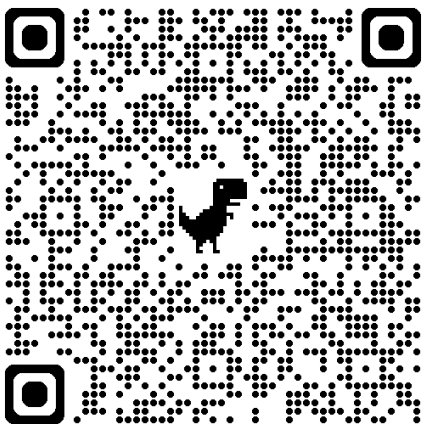
Chapter 3.1.13. Mammalian tuberculosis (infection with *Mycobacterium tuberculosis* complex)





Notification to WOAH: World Animal Health Information System (WAHIS)

1. Bovine tuberculosis was a WOAH listed disease until 2019.
2. As of 2019, it became 'Infection with *Mycobacterium tuberculosis* complex' so as to include more *Mycobacterium* species causing tuberculosis in humans and animals.
3. For the purposes of the *Terrestrial Code*, *M. tuberculosis* complex comprises *M. bovis*, *M. caprae* and *M. tuberculosis*





Chapter 8.12. Case definition

3 strains
4 families



MTBC strains

- *M. bovis*, *M. caprae* and *M. tuberculosis*
- *excluding vaccine strains

Susceptible animals

- Domestic and captive wild animal populations
- Bovids: Cattle, Bison And Water Buffalo,
- Cervids: red deer, sika, sambar, rusa, roe deer, fallow deer, white tailed and mule deer and reindeer/caribou
- Goat
- New world Camelids: alpacas and llamas.

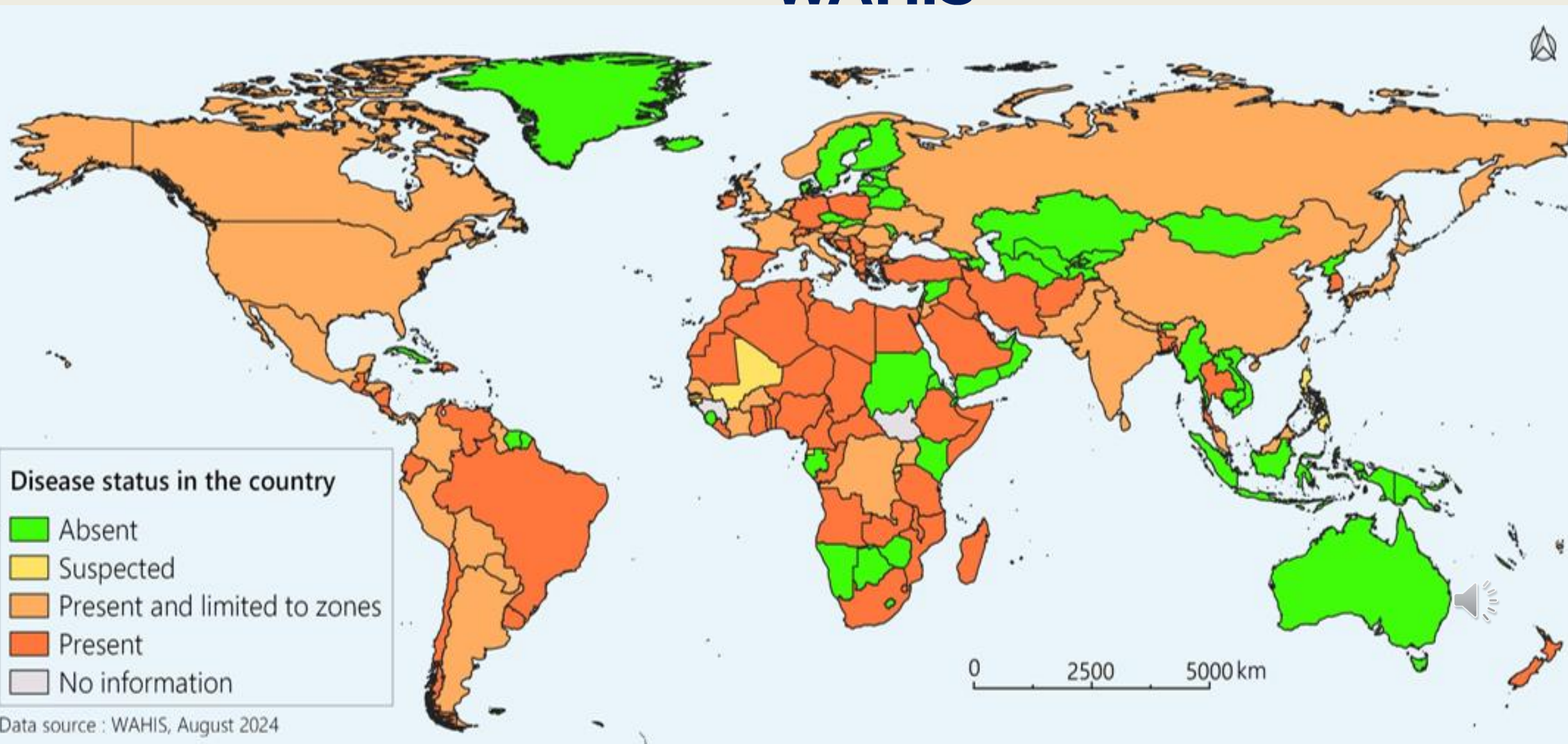
Diagnostic criteria

- Non-clinical + clinical animals both
- MTBC has been isolated from a sample from an animal or **product derived from animal**
- Positive results to a diagnostic test have been obtained, with epidemiological link to a case or there is reason to suspect





Global distribution of bovine Tb (2014-2023) - WAHIS





Reference Lab Network to Support Our Members

Dr Bernardo Alonso

ARGENTINA

Dr María Laura Boschioli-Cara

FRANCE

Dra. Beatriz ROMERO MARTINEZ

SPAIN

Dr Jason Sawyer

UNITED KINGDOM

Prof. Ulrich Wernery

UNITED ARAB EMIRATES

Dr. Tyler C. Thacker

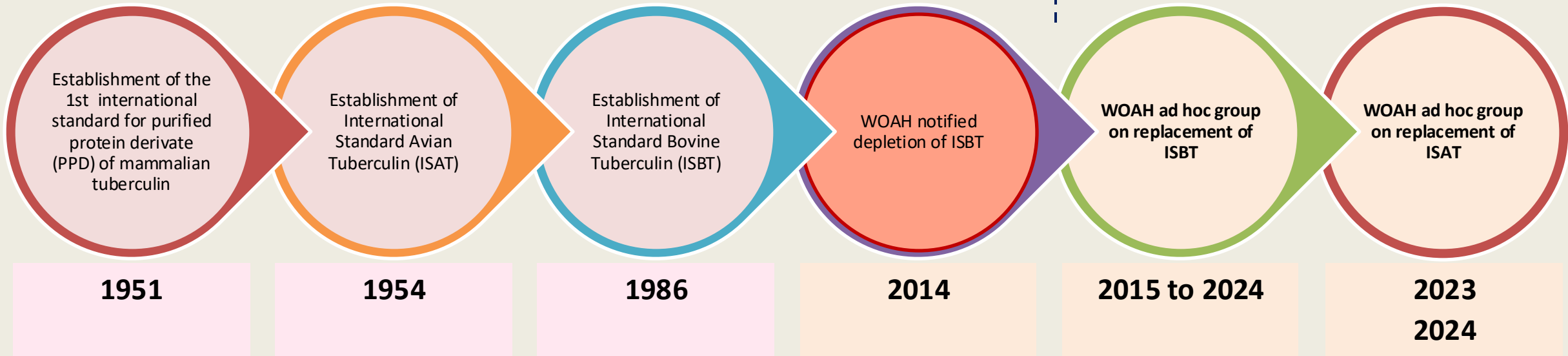
UNITED STATES OF AMERICA



Replacement of international standards ISBT and ISAT

The ISBT & ISAT is used as a reference standard for quality control tests for purified protein derivative (PPD) bovine tuberculins that are used in bTB surveillance, diagnosis and export certification.

Establishment & meeting of
WOAH *ad hoc* group



Research Coordination for Tuberculosis

STAR-IDAZ IRC: coordinate animal health research globally to accelerate delivery of disease control tools and strategies.

Priority areas – Bovine tuberculosis

Working group on bovine Tb.



STAR-IDAZ
International Research
Consortium on Animal Health

Global Research Alliance
for Bovine Tuberculosis
(GRAbTB)



Executive summary of
priority research needs
Bovine tuberculosis
May 2024



The Secretariat for the STAR-IDAZ IRC (SIRCAH) is funded from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727494

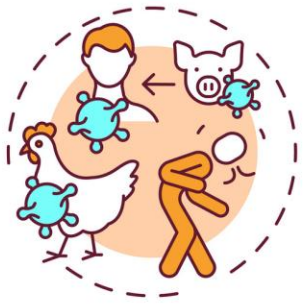
Executive summary of priority research needs | Bovine tuberculosis | May 2024

Bovine TB

up to **10%**

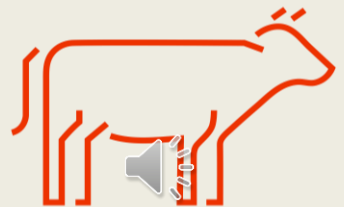
of **human tuberculosis** cases across different countries are attributed to **zoonotic tuberculosis**, particularly caused by *M. bovis*.

Zoonotic TB is a form of TB in people predominantly caused by a closely **related species, *M. bovis*, which belongs to the *M. tuberculosis* complex.**



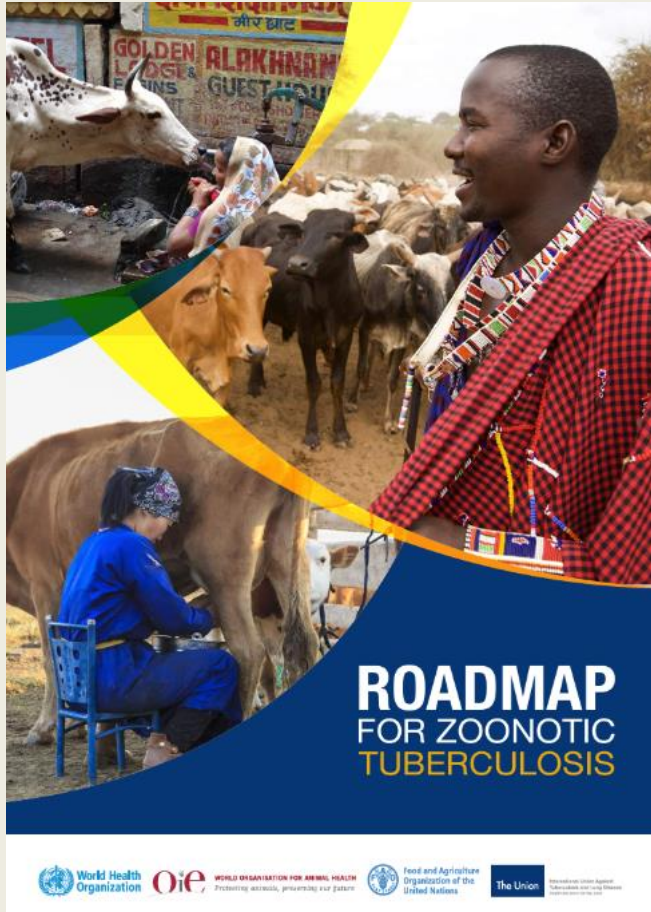
Zoonotic Diseases

EDITABLE STROKE





Tripartite commitment to fight zoonotic TB



[...]

- reduce the prevalence of TB in livestock;
- the development of policies and guidelines for the prevention, surveillance and control of TB in animals
- the implementation of community-based interventions to reduce burden of TB in humans and livestock, recognizing the cultural and socioeconomic realities of each setting.

[...]

10

PRIORITIES
FOR
ADDRESSING
ZOONOTIC TB





Bovine TB control alternatives



In 2020, WOAHA experts convened to:

- Discuss the challenges to reduce the prevalence of TB in livestock in places where elimination may not be feasible;
- Explore community-based interventions to reduce the burden of TB in livestock, recognizing the cultural and socioeconomic realities of each setting.

The selected TB control alternatives would need to be...

WOAH Guidelines available by first quarter of 2024

FLEXIBLE

ADAPTABLE

SCIENCE - BASED

**CONSIDER
SOCIOECONOMIC
AND CULTURAL
SETTINGS**

Current Challenges and Opportunities



1. Data

- Burden of mammalian TB
- Quantify the public health risk of mammalian TB

2. Case for investment

- Prioritisation among other zoonotic diseases
- Resource mobilisation
- Increase the political will

3. Technical: expert's opinion (e.g. diagnostic, surveillance, wildlife reservoir, etc)



ONE HEALTH HIGH IN THE AGENDA



Thank you!

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

