Zoonotic Tuberculosis

STDF Working Group

Geneva, 20 October 2016

What is tuberculosis (TB)?

➢ Tuberculosis (TB) is one of the oldest diseases of humans

➢ TB is caused by the bacterium *Mycobacterium tuberculosis* complex, which includes *M. bovis* (zoonotic TB)

➢ TB usually affects the lungs, although other organs can be involved
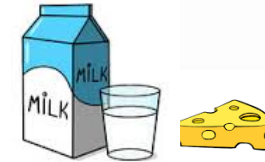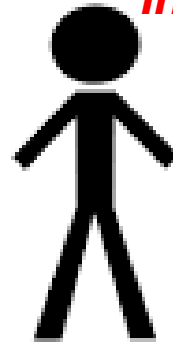
In 2015, 10.4 million new cases and 1.4 million deaths

What is zoonotic TB?

Major route from cattle to people is **unpasteurised dairy products**
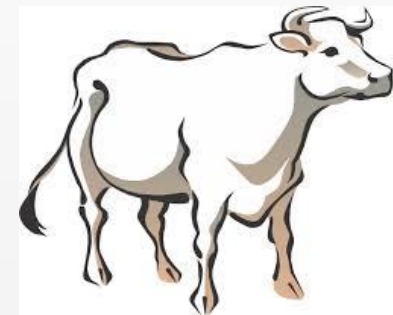
Wildlife reservoir important in some settings

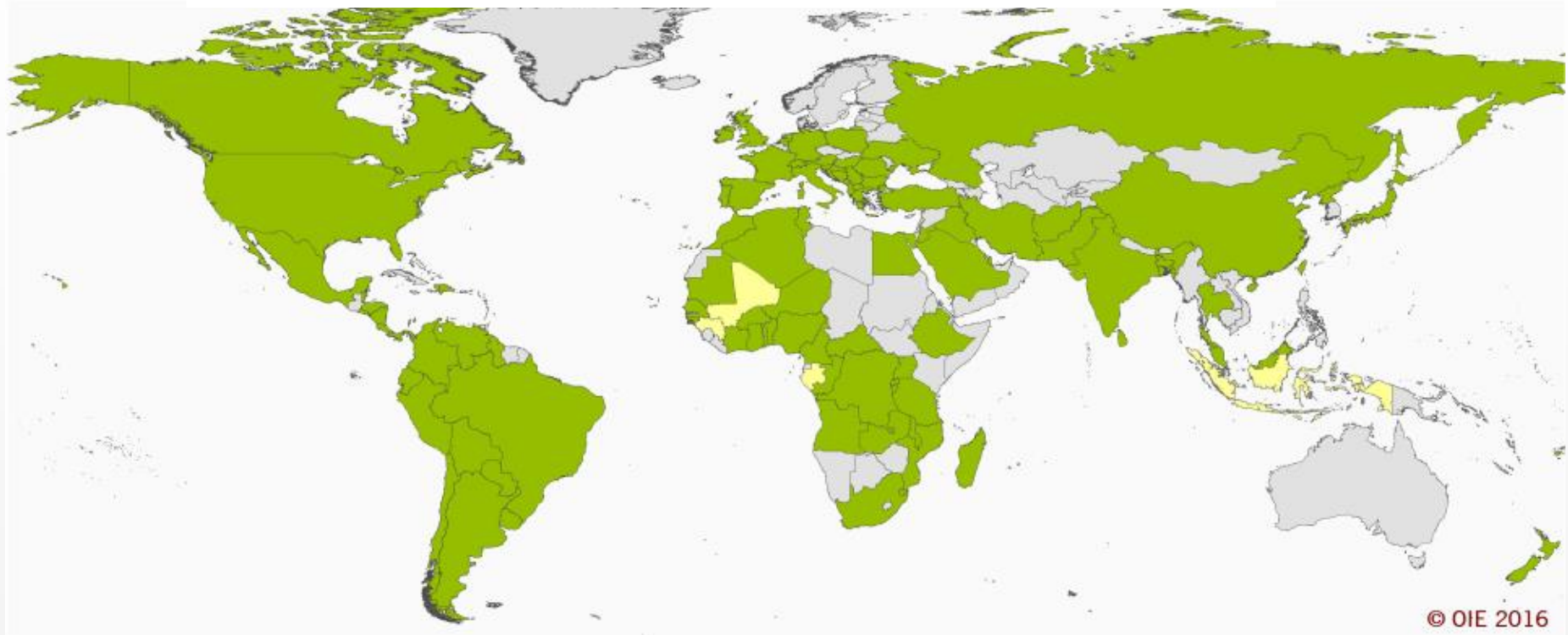*In 2015, 149,000 new cases*

Unpasteurised dairy products

Direct contact
Contaminated pasture/water

Countries reporting TB in cattle

Data officially reported to
World Organisation for Animal Health (OIE), 2014-2015

Last update March 2016

© OIE 2016

■ Present or suspected in domestic and/or wild animals (reported at least once/four semester)
□ Disease reported absent
□ No informations provided

World Health Organization

GLOBAL TB PROGRAMME

END TB

Challenges of zoonotic TB

- Linked to cultural and social practices
- Affects poor, marginalised communities
- Diagnostic challenge
  - Usually <u>extra</u>-pulmonary (neck or gastrointestinal lymph nodes)
  - Routine TB diagnostic procedures do not differentiate bacterial species (*M. tuberculosis* versus *M. bovis*)
- Treatment challenge
  - Resistant to one of the key drugs used for standard TB treatment

Rationale for action

- **UN Sustainable Development Goals 2016-2030** emphasise a **multidisciplinary** approach to improving health – zoonotic TB impacts on human health, livestock productivity, trade and the economy

- **WHO's END TB Strategy 2016-2035** seeks to end the global TB epidemic by 2035 and calls for diagnosis and treatment of **every TB case**

One Health approach

- Zoonotic TB in people cannot be fully addressed without controlling the disease in the animal reservoir – mainly cattle, but also wildlife in some settings

- Addressing zoonotic TB will bring added benefits to the control of other zoonotic diseases in both people and animals

- Engagement of the WHO/OIE/FAO tripartite is strengthening efforts to control zoonotic and bovine TB
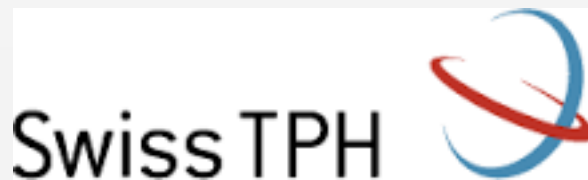
Food and Agriculture Organization of the United Nations

OIE WORLD ORGANISATION FOR ANIMAL HEALTH

World Health Organization

World Health Organization

GLOBAL TB PROGRAMME

END TB

Zoonotic TB working group

USDA

The Union — International Union Against Tuberculosis and Lung Disease — *Health solutions for the poor*

World Health Organization

CDC — CENTERS FOR DISEASE CONTROL AND PREVENTION

OIE — World Organisation for Animal Health

FAO — Food and Agriculture Organization of the United Nations

ROSLIN

Colorado State University — COLLEGE OF VETERINARY MEDICINE & BIOMEDICAL SCIENCES

UNIVERSITY OF IBADAN — *...the first and the best*

Stop TB Partnership

Animal & Plant Health Agency

Swiss TPH

Geneva, April 2016

Zoonotic TB roadmap for advocacy and action

Improve scientific evidence base

Surveillance

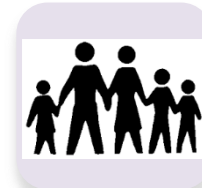**Diagnostic tools**

Research

Reduce transmission at animal-human interface

Disease control in animals

Key populations

Food safety

Strengthen intersectoral approaches

Raising awareness and engaging stakeholders

Policies and guidelines

Joint human/animal health interventions

Political commitment and funding

Next steps

- Tripartite of WHO/OIE/FAO and The Union Against TB and Lung Diseases to lead development and finalisation of zoonotic TB roadmap

- Roadmap will be launched in first quarter of 2017 and will:
  - ➢ promote collaborative action of researchers, policymakers and donors
  - ➢ provide guidance to stakeholders for the prioritization of activities
  - ➢ serve as an advocacy tool.

Food and Agriculture Organization of the United Nations

OIE WORLD ORGANISATION FOR ANIMAL HEALTH

World Health Organization

World Health Organization

GLOBAL TB PROGRAMME

END TB