

Organisations join forces, launches roadmap to combat zoonotic TB

Close collaboration between those working to improve human and animal health are necessary to combat animal tuberculosis (bovine TB) and its transmission to humans, referred to as zoonotic TB, most often through consumption of contaminated untreated meat or dairy products from diseased animals.



Skitterphoto via [pixabay](#)

Built on a [One Health approach](#) - addressing health risks across sectors - the [Roadmap for Zoonotic TB](#) was launched at the [48th Union World Conference on Lung Health](#) taking place in Guadalajara, Mexico.

Four partners in health, the World Health Organization (WHO), the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO) and the International Union Against Tuberculosis and Lung Disease (The Union) have joined forces to develop the roadmap and address the major health and economic impact of this disease.

New data released by the World Health Organization (WHO) estimates that over 140,000 people fall ill and more than 12,000 people lose their lives each year to zoonotic TB - mostly in the African and the South-East Asian regions.

"We have made progress towards ending TB, yet to a large extent, people with zoonotic TB are left behind. The priorities outlined in this roadmap highlight the need for multisectoral action to tackle this neglected form of TB and achieve the targets of the UN Sustainable Development Goals and WHO's End TB Strategy," said Mario Raviglione, director of the WHO Global TB Programme. "Together we can save lives and secure livelihoods".

Contaminated meat

Bovine TB is most often communicated to humans through food consumption, usually non-heat-treated dairy products or raw or improperly cooked meat from diseased animals. Direct transmission from infected animals or animal products to people can also occur.

"This multidisciplinary roadmap represents a milestone in the fight against TB in both people and animals," said Paula I Fujiwara, scientific director, The Union. "Better technologies, better science and better governance for affected communities bearing the bovine TB burden in poorer rural areas must become the new mantra if we are to get on the path to eliminating TB absolutely everywhere".

But zoonotic TB is largely hidden. The advanced laboratory tools required to diagnose zoonotic TB are frequently unavailable. The disease is resistant to pyrazinamide - one of the standard first-line medications used to treat TB. Patients are, therefore, often misdiagnosed and may receive ineffective treatment.

"We must recognise the interdependence of the health of people and animals in the fight against TB. Specifically, bovine TB, caused by *Mycobacterium bovis*, affects cattle, threatens people's livelihoods and results in major economic and trade barriers, as well as posing a major risk to food safety and human health," said Berhe Tekola, director of the FAO Animal Production and Health Division.

Ten priority actions to tackle zoonotic TB in people and bovine TB in animals

The roadmap, supported by the four partners, articulates 10 priority actions that human and animal health actors should take, and defines milestones for the short- and medium-term:

Improve the evidence base

1. Systematically survey, collect, analyse and report better quality data on the incidence of zoonotic TB in people, and improve surveillance and reporting of bovine TB in livestock and wildlife.
2. Expand availability of appropriate diagnostic tools and capacity for testing to identify and characterise zoonotic TB in people.
3. Identify and address research gaps in zoonotic and bovine TB including epidemiology, diagnostic tools, vaccines, effective patient treatment regimens, health systems, and interventions coordinated with Veterinary Services.

Reduce transmission between animals and humans

4. Develop strategies to improve food safety.
5. Develop capacity of the animal health sector to reduce the prevalence of TB in livestock.
6. Identify key populations and risks pathways for transmission of zoonotic TB.

Strengthen intersectoral collaboration

7. Increase awareness of zoonotic TB, engage key public and private stakeholders and establish effective intersectoral collaboration.
8. Develop and implement policies and guidelines for the prevention, surveillance, diagnosis, and treatment of zoonotic TB,

in line with intergovernmental standards where relevant.

9. Identify opportunities for community-tailored interventions that jointly address human and animal health.

10. Develop an investment case to advocate for political commitment and funding to address zoonotic TB across sectors, at the global, regional and national levels.

Many of these recommended interventions for controlling bovine and zoonotic TB will also bring substantial benefits for the prevention of other zoonotic and food-borne diseases, for example, caused by Brucella.

Addressing the animal health and socio-economic impact of zoonotic TB

The impact of zoonotic TB extends beyond human health.

Matthew Stone, OIE deputy director-general, international standards and science, noted: "Preventing and controlling bovine TB at its animal source is crucial to avoid its transmission to humans, improve food safety and protect the livelihood of many rural communities. To this aim, the implementation of strategies based on international standards and a cross-sectoral approach will enable improved surveillance and diagnosis of the disease in animals and consequently reduce the risks for humans."

Bovine TB also threatens animal welfare and those with livelihoods based on livestock. The disease can economically devastate cattle production with losses related to animal production, markets and trade, as well as costs incurred to implement surveillance and control programmes. In order to eliminate the disease, domestic livestock found to be infected with bovine TB must be slaughtered under veterinary supervision.

Wealthier countries are affected as well. In the US, more than \$200m was required in emergency funding between 2000 and 2008 to respond to bovine TB outbreaks. Wildlife can also be infected, serving as a reservoir of infection for livestock and people. This can potentially threaten wildlife conservation efforts.

The roadmap is a critical call for action to energise the response and the resources urgently needed to tackle zoonotic and bovine TB.

For more, visit: <https://www.bizcommunity.com>