



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

Experts Call for Action Against Food- and Animal-borne Tuberculosis

Public call made in advance of the 47th Union World Conference on Lung Health

London, United Kingdom, 30 September 2016 – Leading veterinary experts and authorities from global public health, animal health and agriculture organisations have today published the first-ever call to action against animal- and food-borne tuberculosis in humans (zoonotic TB). [The call to action, published as a commentary piece in *The Lancet Infectious Diseases*](#), was made in advance of the [47th Union World Conference on Lung Health](#), convening in Liverpool, England, October 26-29. Widely considered to be an under-reported disease, zoonotic TB is projected to affect over one million people over the next decade at the annual current World Health Organization (WHO) projections.(1)

The commentary piece, which surveys the available data on “zoonotic” strains of tuberculosis, concludes that zoonotic TB poses unique, unmitigated risks to public health, to food supplies, and to the animal production sectors of national and global economies. Moreover, the scale of the challenge is likely significantly underestimated by the currently available data. Because zoonotic TB differs from conventional TB, is transmitted primarily through food supplies and livestock, and is naturally resistant to pyrazinamide—a standard medicine used to treat conventional TB—the authors have called on governments around the world to implement a coordinated, targeted response.

The commentary piece was authored jointly by authorities from leading public health agencies including WHO, the U.S. Centers for Disease Control and Prevention, the Pan-American Health Organisation, the Stop TB Partnership, the International Union Against Tuberculosis and Lung Disease (The Union); but also the World Organisation for Animal Health (OIE), the UN Food and Agriculture Organization and experts from the US Department of Agriculture; from Colorado State University in the U.S. and the Royal School of Veterinary Studies of the University of Edinburgh, Scotland.

“This is the first time that veterinary scientists, along with leaders of major global human health, animal health and agriculture agencies, have come together to call for a coordinated international response to zoonotic tuberculosis,” said Dr Francisco Olea-Popelka, Assistant Professor at Colorado State University and lead author of the commentary piece. “Not all TB is the same, and the evidence points to zoonotic TB being far more common than previously

recognised. We are calling for a coordinated response that addresses human, animal and agricultural concerns at a scale proportionate to the challenge.”

Unlike conventional TB, which is caused by the bacterium *Mycobacterium tuberculosis*, zoonotic TB is caused by a different bacterial strain: *Mycobacterium bovis* (*M. bovis*). Also unlike conventional TB, which is airborne and transmits from person-to-person, zoonotic TB originates first in animals and then spreads through food supplies or through direct contact with animals to people. Once a person develops symptoms caused by zoonotic TB, the disease can spread from person to person.

According to the commentary, the true burden of zoonotic TB is unknown, due to weak surveillance, particularly in low-income countries where TB is common. Currently, the WHO estimates that there exist around 120,000 new cases of zoonotic TB globally per year.

“With approximately nine million individuals contracting TB globally each year, even relatively low percentages of zoonotic TB lead to large numbers of people suffering from this form of the disease,” said Dr. Paula I. Fujiwara, Scientific Director of The Union. “People living with zoonotic TB require specialized care, but in the vast majority of cases, they are not even adequately diagnosed.”

Domestic livestock found to be infected with zoonotic TB typically must be slaughtered, leading to potentially devastating financial losses for agricultural workers and firms—especially in low- and middle-income countries. Wealthier countries are also not immune. In the U.S., the budget of the federal program to control zoonotic TB has remained flat at \$15 million annually since 2005—requiring more than \$200 million in emergency funding between 2000 and 2008 to respond to zoonotic TB outbreaks.

The Call to Action has been made on the heels of the High-Level Meeting on Antimicrobial Resistance, convened last week at the United Nations General Assembly, where UN Secretary General Ban Ki Moon called drug-resistance a “fundamental threat.” It is currently unknown to what extent zoonotic TB contributes to TB drug-resistance. Zoonotic TB is naturally resistant to pyrazinamide, a drug used as part of standard treatment for TB. Patients diagnosed with TB who actually have zoonotic TB, therefore, receive suboptimal treatment that can affect treatment outcomes. In 2014, only 12 percent of confirmed cases of TB received testing for drug resistance.

“Countries around the world have committed to eliminating TB by 2035 but this will only be possible if we address the zoonotic form of the disease. We hope this report leads the response we need to address the challenge and prevent unnecessary deaths among both humans and animals,” said Dr. Lucica Ditiu, Executive Secretary of the Stop TB Partnership.

“Because it’s coming from animals, zoonotic TB requires intervention at the animal source. In zoonotic TB we are facing one of the world’s most truly inter-sectoral health challenge,” said Dr Elisabeth Erlacher-Vindel, Head of the Science and New Technologies Department of the World Organisation for Animal Health (OIE).

The authors call for a response based on the principles of “One Health.” The One Health approach recognises that human health and animal health are inter-related and require a coordinated response that draws from both disciplines, with actions further informed by social science and economics.

The Call to Action identifies four priority solutions to addressing zoonotic TB: (i) Develop and implement official policies and guidelines that lay out priority activities; (ii) Routinely survey for zoonotic TB among animal populations, (iii) Expand the use of diagnostic tools in order to

collect accurate data on zoonotic TB among people—especially in countries where zoonotic TB is endemic; (iv) Use evidence gathered through these activities to advance TB policy and practice. The authors also call for a public health campaign to educate policymakers, healthcare practitioners and the general public about risks posed by zoonotic TB.

Notes to Editors

(1) Zoonotic Mycobacterium bovis–induced Tuberculosis in Humans

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4816377/>

About TB

TB killed an estimated 1.5 million people in 2014 according to the WHO —making it the world's leading cause of death from an infectious disease. Approximately 9 million people contract tuberculosis annually. Of these, an unknown number are infected with the zoonotic form of the disease, caused by *M. bovis*. Evidence gathered to date has suggested a conservative estimate of 1.4 percent of all tuberculosis cases, with the actual percentage likely higher. Conventional tuberculosis is an airborne infectious disease. Zoonotic tuberculosis is typically transmitted to people through the ingestion of food products produced from animals with *M. bovis* tuberculosis.

About the Union World Conference on Lung Health

<http://liverpool.worldlunghealth.org/>

The 47th Union World Conference on Lung Health will convene 26-29 October 2016 in Liverpool, England. Attracting delegates from more than 125 countries, the Union World Conference is the world's largest gathering of clinicians and public health workers, health programme managers, policymakers, researchers and advocates working to end the suffering caused by lung disease, with a focus specifically on the challenges faced by the low- and middle-income countries. The theme of the upcoming conference is **Confronting Resistance: Fundamentals to Innovations**. The theme addresses critical issues in public health, including the growing problem of resistance to TB drugs, and confronting resistance from the powerful tobacco industry in our pursuit to reduce tobacco use.

Press contacts:

Michael Kessler

Press Coordinator - The Union

Mobile: +34 655 792 699

e-mail: michael.kessler@intoon-media.com

Skype: mickgpi

Twitter: @mickessler