

ATS 2009 • San Diego

The American Thoracic Society's 105th International Conference, May 15 to 20, 2009



We help the world breathe
PULMONARY • CRITICAL CARE • SLEEP

News Release

FOR RELEASE MAY 17, 2009 at 1:30 p.m. PDT

FOR MORE INFORMATION, CONTACT:

Keely Savoie or Brian Kell

ksavoie@thoracic.org or bkell@thoracic.org

ATS Office: 212-315-8620 or 212-315-6442 (until May 13)

Cell phones: 917-860-5814 (KS) or 516-305-9251 (BK)

ATS Press Room: 619-525-6323, 619-525-6324 or 619-525-6325 (May 15 to 20)

Mini-Symposium time: May 17: 1:30 p.m. to 4 p.m.

Presentation time: May 17: 3:30 p.m.

Location: San Diego Convention Center, Room 33 A-C (Upper Level)

Infection Control “Urgently Needed” to Curb Spread of XDR-TB Among Healthcare Workers

ATS 2009, SAN DIEGO—Healthcare workers in South Africa are at a significantly increased risk of developing drug-resistant tuberculosis, or XDR-TB, in a trend which threatens to further exacerbate the already beleaguered healthcare systems in sub-Saharan countries, according to results of a new study. Researchers say the results underscore the urgent need for stringent TB screening policies among healthcare workers in these areas.

Keertan Dheda, M.D., Ph.D., Associate Professor of Medicine at the University of Cape Town in South Africa, and collaborators, Julie Jarand, M.D. from University of Calgary and Max O’Donnell, M.D. from the Boston University, will present their findings at the 105th American Thoracic Society International Conference in San Diego on Sunday, May 17.

XDR-TB is a potentially untreatable strain of tuberculosis that is resistant to all major primary and secondary anti-tuberculosis drugs. This retrospective study is the first to focus on healthcare workers who have contracted XDR-TB in a non-outbreak setting, said Dr. Dheda.

“The purpose of this study was to describe a series of healthcare workers in South Africa with extensively drug-resistant tuberculosis and to determine whether XDR-TB was prevalent among them,” Dr. Dheda noted.

The study was based on a chart review of 270 patients in South Africa with passively detected XDR-TB, including 11 healthcare workers. Of those 11, eight were working in district hospitals, 10 had been treated for TB at least once previously and eight were negative for HIV. At the time these workers were diagnosed with XDR-TB, there were no standard infection control measures in place at the facilities where they were employed. In separate presentations Dr. O’Donnell and Dr. Dheda will present their findings from Kwa-Zulu Natal and four treatment centers in South Africa, respectively.

Dr. Dheda noted that although tuberculosis is a well-recognized occupational risk for healthcare workers in both low- and high-income countries, the prevalence and natural history of XDR-TB in these workers is unknown.

“The emergence and progression of XDR-TB is threatening to destabilize global tuberculosis control,” he said. “The negative impact of XDR-TB is further exacerbated by a global shortage of healthcare workers, a shortage which has reached crisis levels in most of sub-Saharan Africa.”

“XDR-TB is an important risk for healthcare workers globally, particularly for those who work or travel to high-burden areas, regardless of HIV status,” Dr. Dheda added. “Implementation of infection control measures and rapid diagnostic testing for all healthcare workers suspected of TB needs to be undertaken urgently to minimize the risk of drug-resistant TB.”

###

Session # A96: “Tuberculosis: Assessing Transmission and Risk”

Abstract # 3036: “Extensively Drug-Resistant Tuberculosis—A Threat to Healthcare Workers”

Scientific Symposium # B85; “Extensively Drug Resistant Tuberculosis: Taking on the Growing Global Challenge” Monday May 18, 1:30-4:00 p.m. Marriott Hall 1-2 (Marriott Pavilion)

[Close Window](#)

ATS 2009 · San Diego International Conference

Abstract Number: 3036

Contact/Presenting Author: Julie M. Jarand

Department/Institution: Medicine, University of Calgary

Address: 3330 Hospital Drive NW

City/State/Zip/Country: Calgary, AB, T2N 4N1, Canada

Phone: +1 403 943-5425 **Fax:** **E-mail:** jmjarand@ucalgary.ca

ATS member: Yes **Student or in training:** No

Funding Source: None.

Abstract Category: 11.02 - Epidemiology of Tuberculosis

Presentation format: Either Poster or Oral

[Preview Disclosure](#)

Travel Award: No

Publication of email address: Yes, jmjarand@ucalgary.ca

I confirm that all authors listed on this abstract have knowledge of the abstract submission:
Yes

Title: Extensively Drug-Resistant Tuberculosis – A Threat to Health Care Workers

J. M. Jarand, MD¹, M. Loveday, MPhil², K. Shean, RN³, P. Willcox, MD³ and K. Dheda, MD³.

¹University of Calgary, Calgary, AB, Canada; ²Medical Research Council, Cape Town, Western Cape, South Africa and ³University of Cape Town, Cape Town, Western Cape, South Africa.

RATIONALE: Extensively drug resistant tuberculosis (XDRTB) has added significant strain to already overwhelmed TB control programs in high burden areas. This strain is further exacerbated by a global shortage of health care workers (HCWs) which has reached crisis levels in parts of sub-Saharan Africa. TB is a well-recognized occupational risk for HCWs in both low and high income countries but the prevalence of XDRTB in HCWs is unknown.

METHODS: Retrospective chart review. Among 317 passively detected XDRTB cases in South Africa, 11 HCWs were identified and described as, to the best of our knowledge, the first series of HCWs with XDR TB in a non-outbreak setting.

RESULTS: Patients were young (mean age 36 years), predominantly female (91%) non-smokers (100%), nurses (72%) working primarily in district hospitals. Eight of the eleven patients were HIV negative. Ten patients had been treated for TB on at least one previous occasion. At the time they were diagnosed with XDRTB, there were no standard infection control measures in place at the facilities where these HCWs worked. The median duration from first multidrug-resistant TB

(MDR-TB) sputum to XDR-TB sputum culture was 19 months. The mean delay in treatment of MDR or XDR-TB was 4 months. All patients were treated with multidrug anti-tuberculous therapy with one patient undergoing adjunctive surgery.

CONCLUSIONS: XDR-TB is an important risk for HCWs globally, particularly for those who work and/or travel to high burden areas, regardless of HIV status. Implementation of infection control measures and rapid diagnostic testing for all HCWs suspected of TB needs to be undertaken urgently to minimize the risk of drug-resistant TB.