

**the Research  
Institute of  
Tuberculosis**

**Information**





## Our Aim is Low Incidence of TB in Japan and a Strengthened Global Base for Fighting TB

Dr. Nobukatsu Ishikawa Director

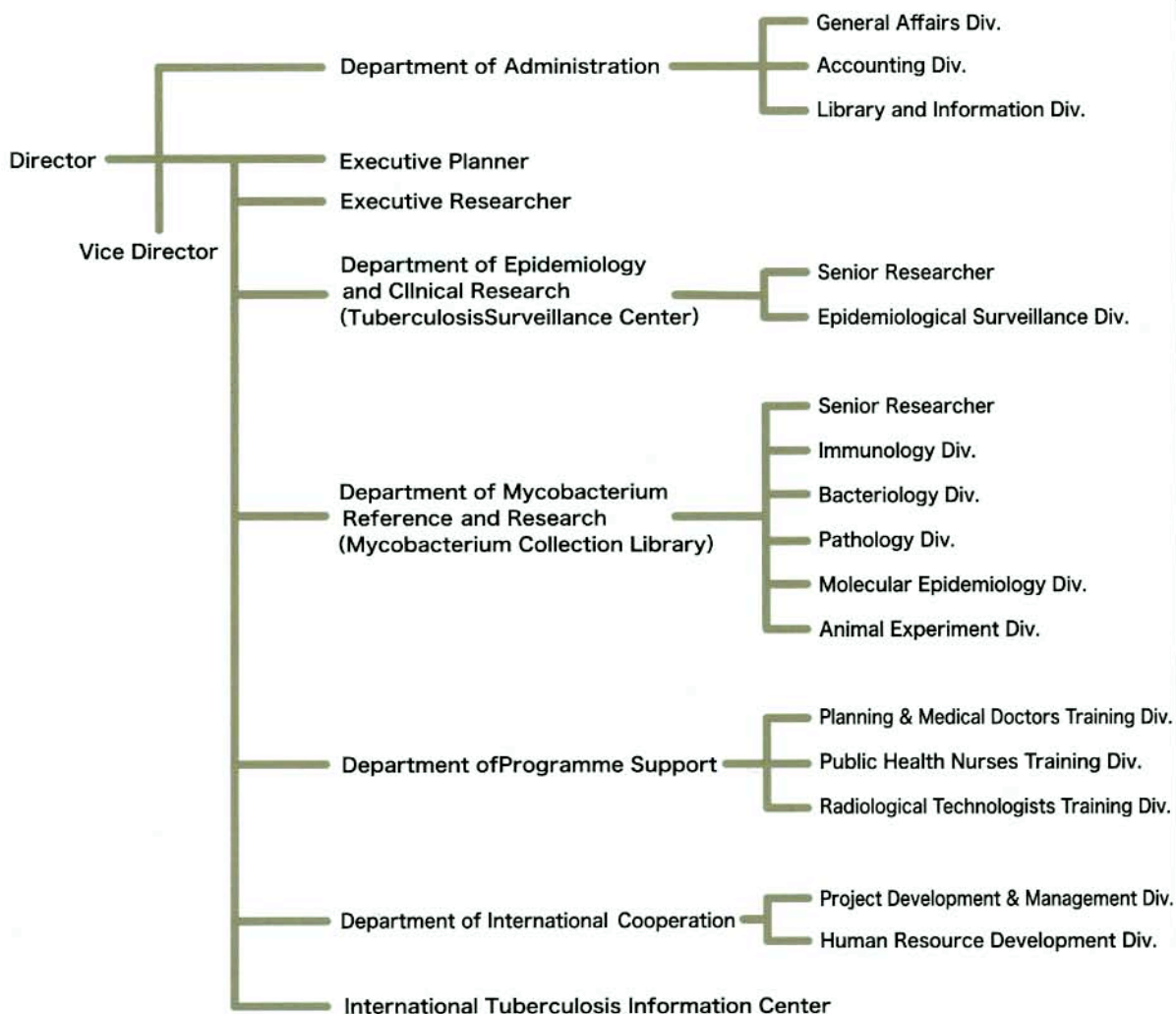
Since its foundation in 1939, when tuberculosis (TB) was extremely prevalent in Japan, RIT has functioned essentially as a national institute with the mission of promoting an effective nationwide TB program through basic and applied research, training and education, program support, and international cooperation. The incidence of TB in Japan has dramatically declined, but it will take another 10-15 years for Japan to reach the status of low incidence (10 cases per 100,000 population). In addition, it might take an entire century to eliminate TB (a rate of one case in a million). Even among developed countries, no country has ever completely eliminated TB. Immigrants and socially vulnerable populations such as the homeless have a much higher risk for TB, and other risk factors for TB such as HIV and diabetes are increasing. Though the number of TB cases may gradually decrease, the importance of risk management for TB in a society will increase. This is because TB will remain for a long time in society, particularly among the high risk populations, and there could sometimes be unexpected outbreaks in schools or work places. And also TB could become drug-resistant if proper measures are not taken. We would like to work harder to attain our mission, accelerating our progress towards low incidence and the elimination of TB in Japan, and strengthening the global base in the fight against TB in the rest of the world.

To this end, we hope for maximum support and collaboration with partners both at home and abroad.

(April 2009)

- May 1939 ● Establishment of JATA by special Decree from Her Imperial Majesty the Empress, with Princess Chichibu as Patroness
- Nov. 1939 ● Establishment of the Research Institute of Tuberculosis (RIT) in Hoseien
- Nov. 1943 ● RIT moved to Kiyose
- Nov. 1947 ● Establishment of the RIT-Attached Sanatorium (currently called Fukujuji Hospital)
- Feb. 1948 ● First Training Course for TB specialists carried out
- 1953 ● First tuberculosis prevalence survey conducted
- Sep. 1954 ● First publication of "Statistics of TB"
- Apr. 1958 ● Separation of RIT-Attached Sanatorium (currently called Fukujuji Hospital)
- Jun. 1963 ● First International Training Course in Tuberculosis Control for doctors from developing countries carried out
- Sep. 1973 ● Hosting the 22nd World TB Congress in Tokyo
- Aug. 1982 ● Designation of RIT as WHO Collaborating Center for Tuberculosis Research and Training
- Apr. 1988 ● Establishment of Department of International Cooperation
- Apr. 1992 ● Establishment of International Tuberculosis Information Center
- Feb. 1995 ● First International Training Course on AIDS Prevention and Care in Asia carried out
- Mar. 1999 ● Establishment of Department of Program Support
- Apr. 2003 ● Establishment of Department of Research, and Establishment of Mycobacterium Reference Center
- Sep. 2008 ● Establishment of Department of Epidemiology and Clinical Research, and Department of Mycobacterium Reference and Research

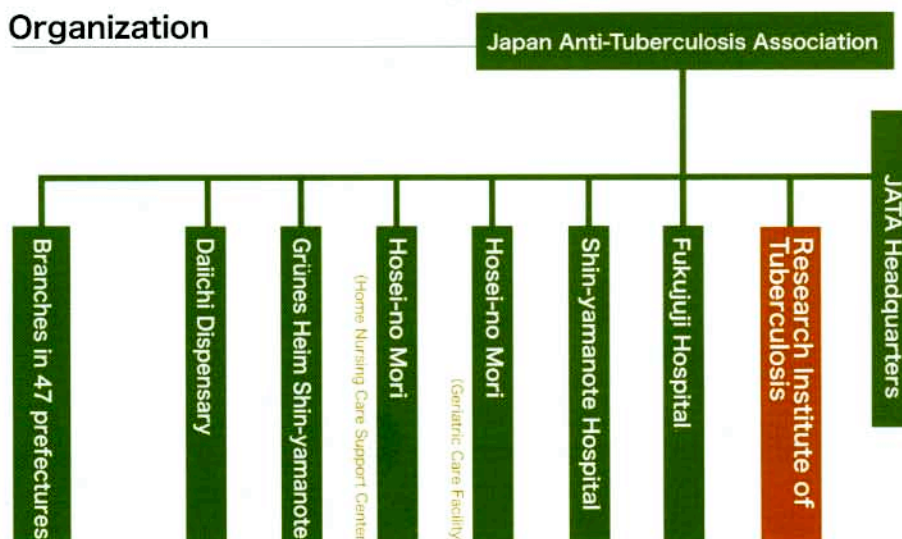
# Organization



As of September 2008

Japan Anti-Tuberculosis Association (JATA) is a public corporation which was established in May of 1939 by the Cabinet Council, after the then Prime Minister received an official message from Her Imperial Majesty the Empress (currently H.I.M Empress Dowager). JATA had its mission to make every effort to fight against tuberculosis. JATA has been honored with the patronage of H.I.H Princess Kiko Akishino since 1994. Under her honorable guidance and support, JATA has made great efforts to eliminate tuberculosis by conducting activities such as advocacy·communication, fund raising, clinical services, research, surveillance, training, and international cooperation. In recent years, JATA has been expanding its activities by conducting theoretical and clinical research on lungcancer and other respiratory diseases. RIT, as one of the facilities under JATA, conducts research, surveillance, training courses, and international cooperation in tuberculosis control.

## Organization



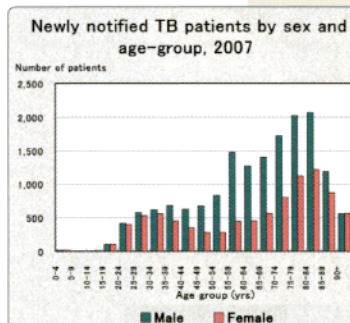
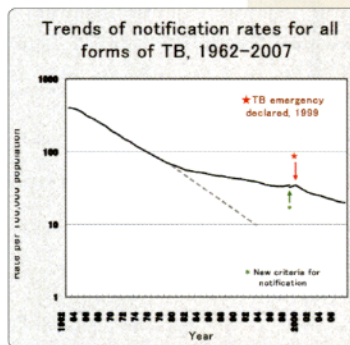
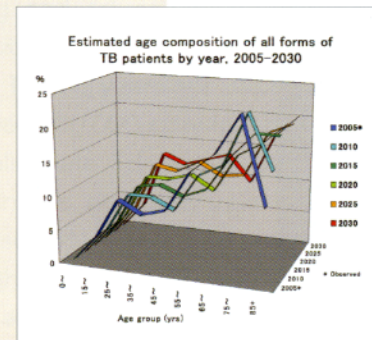
Address of JATA Headquarters: 1-3-12 Misaki-cho, Chiyoda-ku, Tokyo 〒101-0061 TEL +81-3-3292-9211

Through the reorganization of RIT (Research Institute of Tuberculosis), the former Department of Research and the Division of Surveillance were united into the one group, called the Department of Epidemiology and Clinical Research.

## Broad Research Activities

As for the research activity, we aim for research that is informative and can be used to improve the Japanese Tuberculosis Program. We perform broad research activities such as clinical investigation, molecular epidemiology, epidemiological study, research and investigation on the administrative systems of tuberculosis program and development of tools supporting tuberculosis programs.

The decline in TB notification rates began to slow down around 1980, and "TB emergency" was declared in 1999 (TB rate was 34.6 per 100,000 population). After the declaration, TB notification rates decreased faster, and the notification rate in 2007 was 19.8 per 100,000 population.



The number of male TB patients is greater than female TB patients. The biggest difference is among those aged 45-64 years old.

## Newly Established Tuberculosis Surveillance Center

At the same time of the organizational reformation, the Division of Epidemiological Surveillance was newly established as the division performing the analysis of Japanese national tuberculosis surveillance data. This division performs the following jobs;

- ① Support the improvement and running of the Japanese national surveillance system
- ② Analysis of monthly and annual tuberculosis surveillance data
- ③ Editing and publishing of "Statistical Yearbook of Tuberculosis in Japan"
- ④ Development and distribution of the Charts of Tuberculosis Control Activity

With the newly established Division of Epidemiological Surveillance, the Tuberculosis Surveillance Center was also opened as a center for distributing tuberculosis epidemiological surveillance data and information. This center performs researches such as analysis of the epidemiological situation of tuberculosis and evaluation of tuberculosis control activities, and disseminates the results of data analysis on tuberculosis surveillance through inter-net and other information materials.

## Our Mission

Our department hopes to contribute to the tuberculosis control efforts in Japan through the above-mentioned two aspects; providing scientific grounds for Japanese tuberculosis control program, and providing epidemiological data and information which are indispensable for local and national tuberculosis control activity.

## Estimated age composition of TB Patients

According to the estimation of future TB incidence, the main groups of patients might shift predominantly to the very old (85+), although the relative proportion of young adult and middle aged TB patients might expand too.

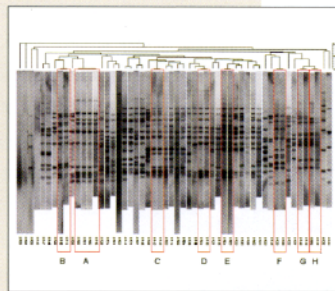


TB Surveillance Center's Information Corner  
The latest information, materials, references, research reports and other information related to TB epidemiology are provided freely to visitors.

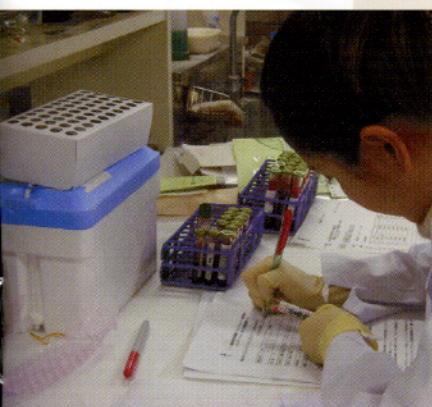
The Department of Mycobacterium Reference and Research (DMRR) is composed of five Divisions: the Immunology Division, the Bacteriology Division, the Pathology Division, the Molecular Epidemiology Division, and the Animal Experiment Division, and a Senior Researcher. DMRR is involved in the basic research of infectious diseases caused by mycobacteria including *M. tuberculosis*, and addresses various subjects to eliminate tuberculosis through the collaboration of basic research and clinical research. DMRR also accepts paid examinations of specimens from outside institutions and hospitals as a part of researches.

## Basic Research Activities as a Specialized Institution for Tuberculosis

We focus on research subjects that are directly linked to measures for tuberculosis control. These include many research subjects on QuantiFERON® TB-2G (QFT-2G), tuberculosis rapid diagnostics, drug susceptibility tests of *M. tuberculosis*, and development of the standardized genotyping method of *M. tuberculosis* using VNTR. In addition, we conduct research on the development of new anti-tuberculosis drugs based on the analysis of factors involved in developing active tuberculosis, and perform PK/PD of anti-tuberculosis drugs. In 2007, we built the Mycobacterium Collection Library, and keep the standard strains of *M. tuberculosis*, clinical isolates and non-tuberculous mycobacteria strains.



RFLP (upper photo) and VNTR (lower photo) are useful for the identification of *M. tuberculosis* in *M. tuberculosis* mass infection.



## Examination Services as a Part of Researches

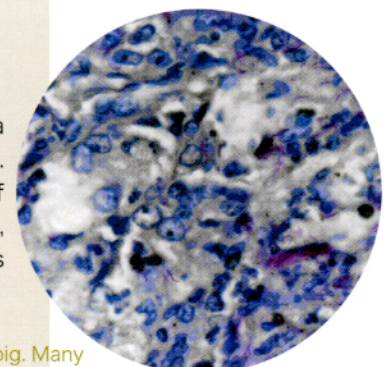
We accept paid advanced examinations that are difficult to perform in general laboratories. These include the QFT-2G test, drug susceptibility tests of *M. tuberculosis*, identification of mycobacteria, nucleic acid sequence analyses of *M. tuberculosis* genes, RFLP, pathologic diagnosis of various tissues, and paid dispensing of mycobacteria.

The QFT test uses *M. tuberculosis*-specific specific antigens to stimulate blood samples, and measures produced interferon- $\gamma$  by ELISA. Because these antigens are absent from BCG and most of non-tuberculous mycobacteria, the QFT test results are not affected by BCG vaccination or infection of most of non-tuberculous mycobacteria.

## Animal Experiment Facility for Joint Researches

This facility is a joint research facility and has a P3-level area where experiments of *M. tuberculosis* infection can be done. Various researches include analysis of the mechanisms of developing tuberculosis and immune functions. Furthermore, development of new anti-tuberculosis vaccines and new drugs are carried out by utilizing rats, mice, guinea pigs and rabbits.

Granulomatous tissue due to *M. tuberculosis* infection in lung of a guinea pig. Many tubercle bacilli stained red with Ziehl-Neelsen staining can be observed.



# Department of Program Support

The Department of Program Support consists of three divisions: 1) Planning and Medical Doctors Training Division, 2) Public Health Nurses Training Division, 3) Radiological Technologists Training Division. The major role of this department is to provide technical support in implementation of the TB control program to national and local governments.



## The Only Human Resource Development Facility for NTP in Japan

Training for various types of health personnel such as medical doctors, public health/clinical nurses, radiologists, laboratory technicians and clerical staff has been conducted in RIT. There are two training courses for medical doctors; one is for public health doctors and another for clinicians. Training for nurses includes DOTS, contact survey, case-study, and several other subjects. Radiologists learn quality assurance of chest X-ray and X-ray diagnosis. Clerical staffs have lectures on TB surveillance and conference of anti-TB special programs. Almost 2,000 health personnel are trained at RIT every year. After training, they work as key personnel for the NTP with latest knowledge and techniques. The network of graduates of this department is effective and beneficial to the progress of the NTP.

TB case conference to develop manpower for NTP

## Program Support Through Seminars and Technical Advice

International TB seminar, Meeting for Promotion in NTP, Regional TB Training Courses and Satellite Meeting about TB outbreaks at the Annual Meeting of the Japanese Society of Public Health are held every year to provide new knowledge of TB control and encourage exchange of valuable experiences.

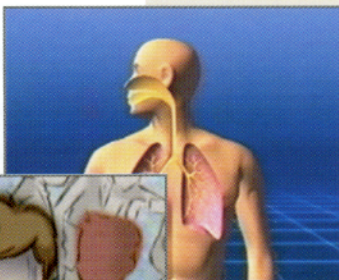
Technical support for TB control activities is made available nationwide by meetings, telephone, FAX, E-mail, and so on.



Annual meeting about recent TB outbreaks

## Anti-TB Promotion Activities

Up-to-date information on the progress of research and new strategies for TB control are displayed in the booth at the Annual Meeting of the Japanese Society of Public Health. The RIT web site also provides information of the latest research and various educational materials for DOTS strategy, program for high risk groups, contact survey, BCG, and so forth.



DVD: Tuberculosis!? However, it doesn't worry.



## Your donations can make a difference! The Double Barred Cross Seal



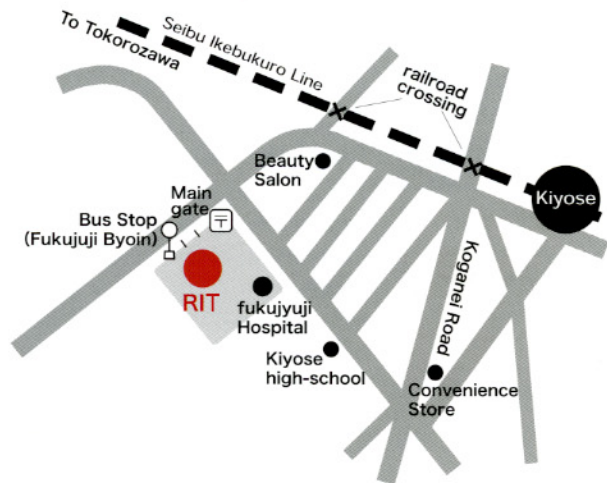
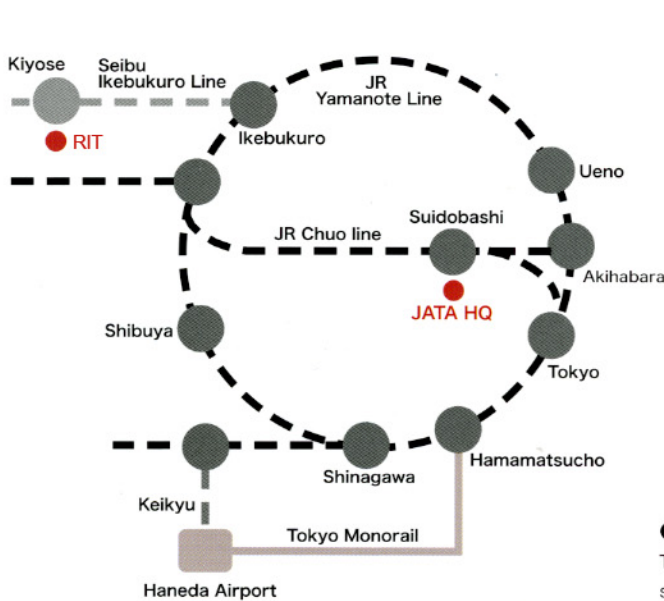
Tuberculosis is no longer "a disease of the past." The Double Barred Cross Seal that has helped raise money to eliminate tuberculosis and lung disease is given to those who make a donation to the Japan Anti-TB Association (JATA). JATA is a non-profit organization and has been given tax-exempt status. Those individuals who donate more than 500,000 yen and corporations that donate more than one million yen will be acknowledged by Princess Akishino, Patroness of JATA.



**Contact us:**  
**Fundraising Division,**  
**Business Department,**  
**Japan Anti-TB Association**  
**Telephone: +81-3-3292-9287**

<http://www.jatahq.org/seal/framepage1.htm>

## Map of the Research Institute of Tuberculosis (RIT)



### ●How to get to RIT

Take the Seibu Ikebukuro line from Ikebukuro and get off at Kiyose station (about 30 minutes from Ikebukuro). From there it is about a 15-minute walk from the South exit of the station. Or, take a Number 2 bus from the same South exit and get off at the 3rd stop "Umezono 1chome Fukujuji Byouin-mae".



**RIT**  
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 OF TUBERCULOSIS, JAPAN

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