

# TB Situation and Control Program in Tokyo



Bureau of Social Welfare and Public Health  
Tokyo Metropolitan Government  
Health & Safety Division Infectious Diseases Control Section

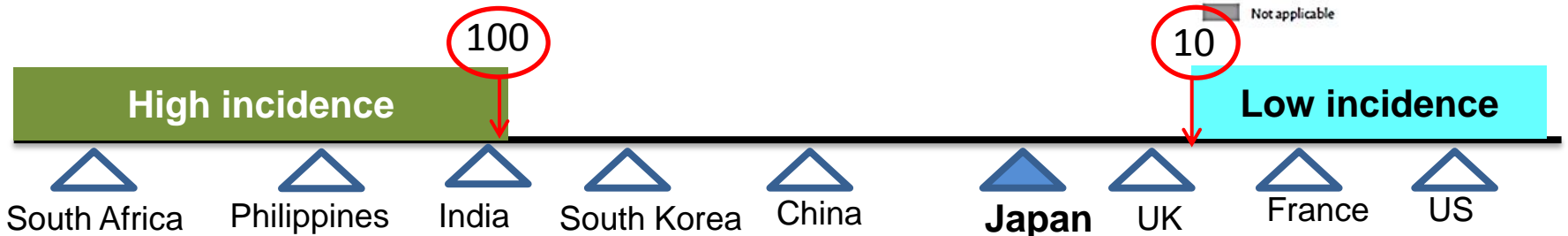
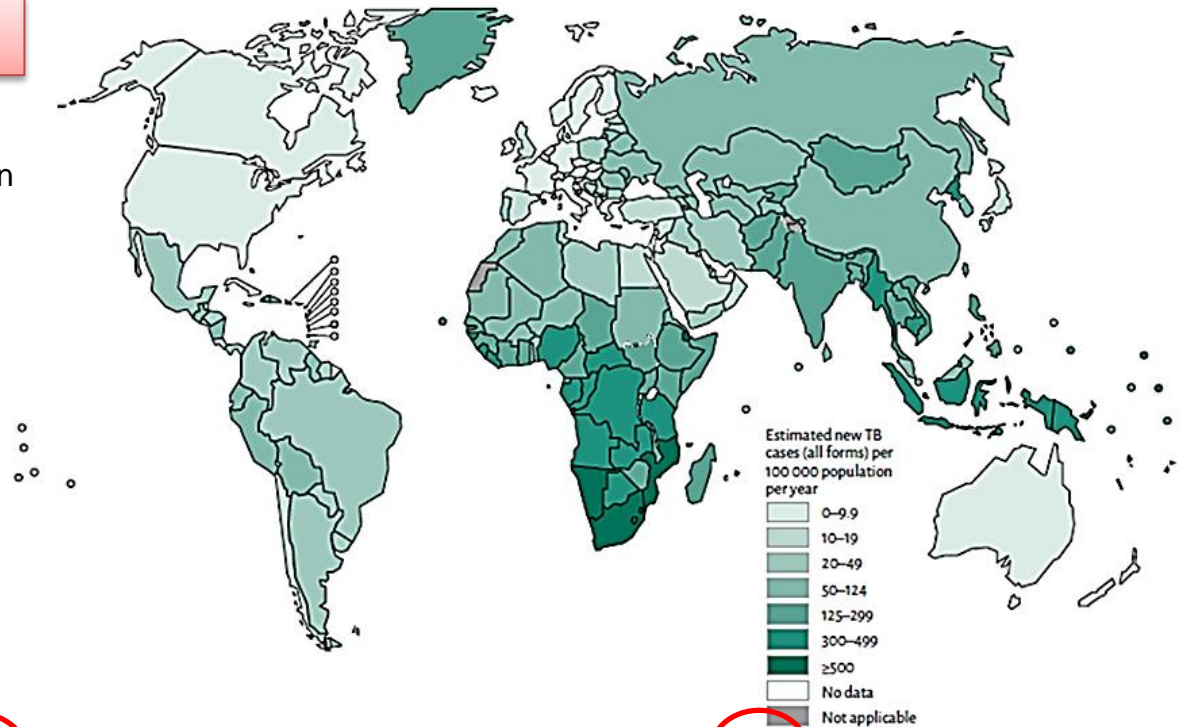
# Global TB Situation

## TB Cases and Death

2014	Global	Japan
Number of Cases	9,600,000	19,615
Number of Death	1,500,000	2,099

## Estimated Incidence Rate(※)

※Incidence Rate  
Number of Cases per 100,000 population



# 31 Public Health Centers in Tokyo



Areas	Management of Health Centers	Number of health centers
23 Ku (special wards)	Each special ward (Ku)	23
City	Hachioji City, Machida City (Shi)	2
Tama areas*	Tokyo (Shi, Machi, Mura)	6
Islands	Tokyo (Mura, Machi)	1

\*Tama areas: western part of Tokyo comprised of cities (shi), towns(machi) and village(mura)

# Summary of 2014 report (1)

- New cases in Tokyo in 2014: 2,533 (19,615 in Japan)
- TB incidence rate in Tokyo: 18.9/100,000 (15.4/100,000 in Japan)
  - for the first time to become below 20 since 1994
  - still 5<sup>th</sup> worst in Japan
- In Tokyo, continuous decline in incidence rate since 2004, the same in Japan since 2000
- Trend of incidence rate according to the age group:
  - 0.3 increase among those age 0~4
  - 0.4 increase among those age 15~19
  - 2.6 increase among those age 20~29
- Number of patients according to the age in new cases: older patients have been increasing especially patients age 60 and above 57.3% in Tokyo (71.4% in Japan)

# Summary of 2014 report (2)

- Time spent between first visit to the clinics and diagnosis: Less than 1 month for 68.0% of new cases with symptoms. However it has declined by 3.1% of the one in 2011.
- There was no significant change in time spent between onset of diseases and diagnosis. 21.1% of new cases were diagnosed less than 1 month after diagnosis.
- TB mortality was 1.6. It became below national data (1.7) for the first time since 1994.
- Percentage of foreign born new cases in all new cases has been increasing and it has been greater in Tokyo than in whole country.

# Tokyo TB Prevention Promotion Plan

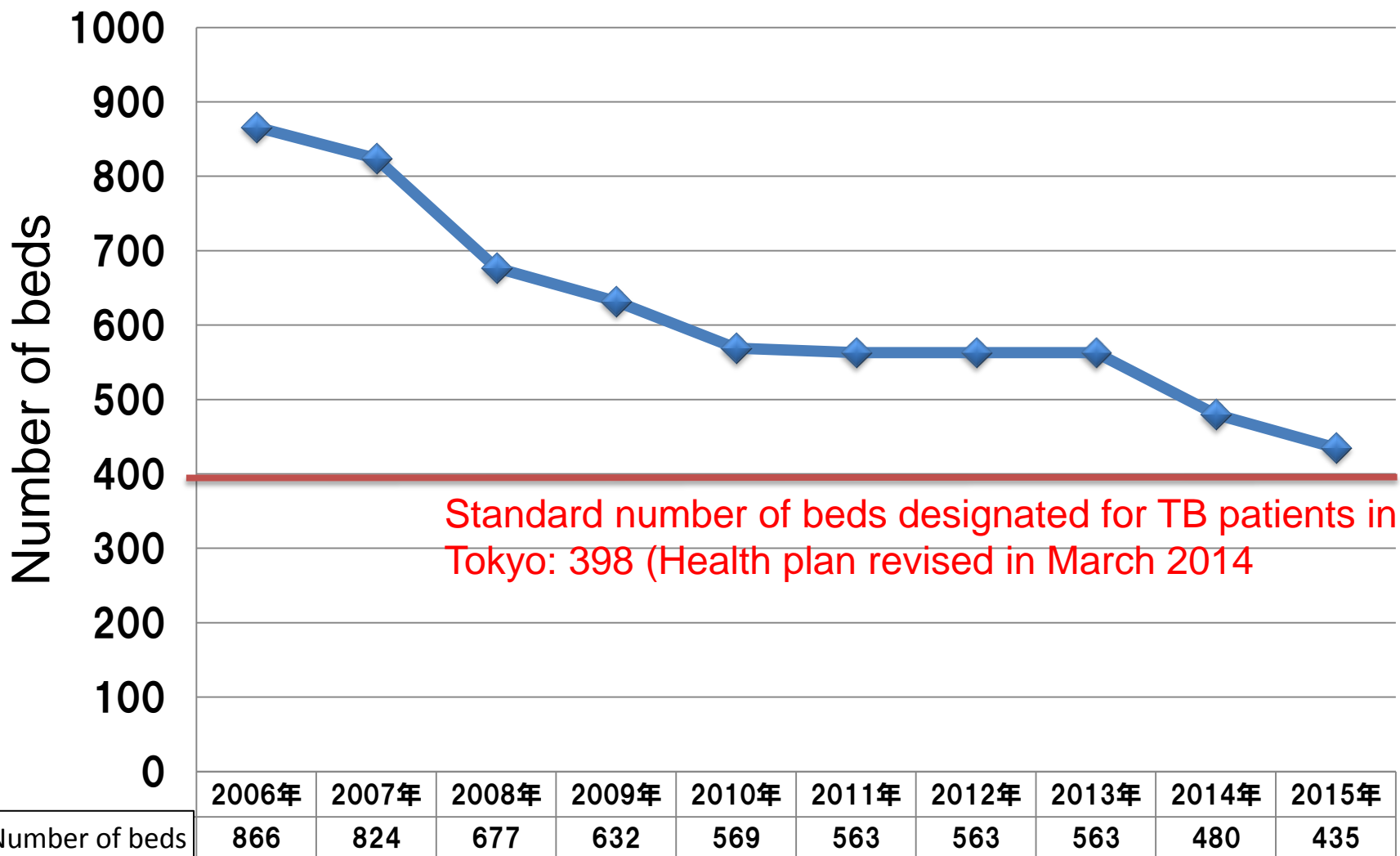
(revised in July 2012)

1	BCG vaccine
2	Early detection of TB patients
3	Appropriate diagnosis and examination
4	Focus on specific groups
5	Securing access to appropriate treatment
6	Care for patients with difficulties in TB treatment
7	Strengthening surveillance
8	Capacity development

# Tokyo TB Prevention Promotion Plan Target and Progress

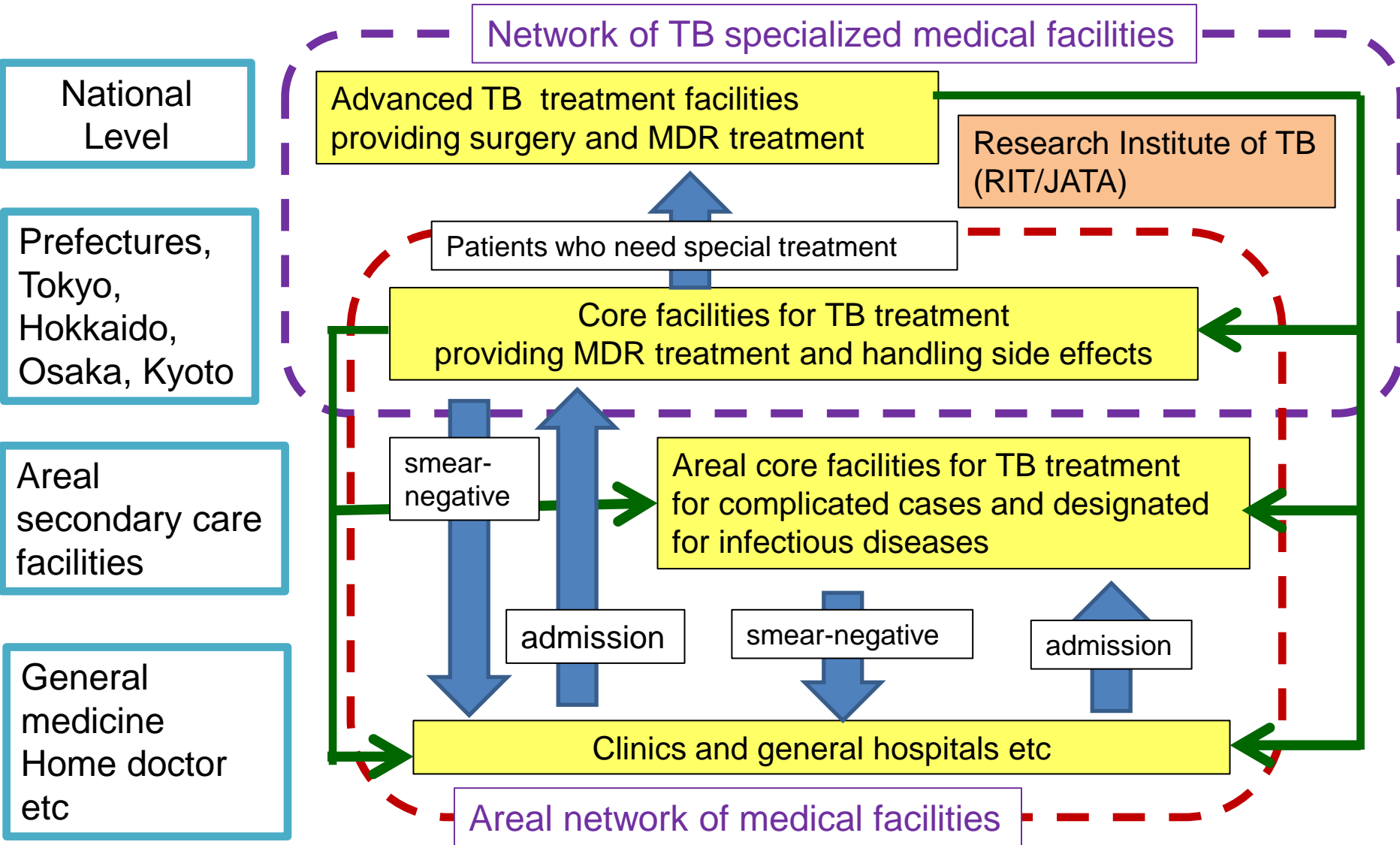
		National target	Tokyo target	Current Situation				
				H22	H23	H24	H25	H26 (tentative)
1	BCG coverage among target population	95%以上	99%以上	96.1%	95.1%	94.3%	88.1%	95.1%
2	Incidence rate per 100,000	15以下	19以下	23.1	22.9	21.7	20.1	18.9
				Decreased by 4.9%/year				
3	% of DOTS implementation for all TB patients	95%以上	95%以上	—	93.6%	97.7%	97.5%	97.1%
4	% of LTBI patients who completed treatment among all LTBI patients	85%以上	85%以上	—	90.4%	89.7%	86.9%	84.4%
5	% of Treatment failure & drop out	5%以下	5%以下	4.0%	4.2%	4.3%	3.1%	4.4%
6	% of retreatment among pulmonary TB patients	7%以下	7%以下	7.1%	7.7%	7.8%	6.3%	6.6%

# Trends of number of beds designated for TB patients



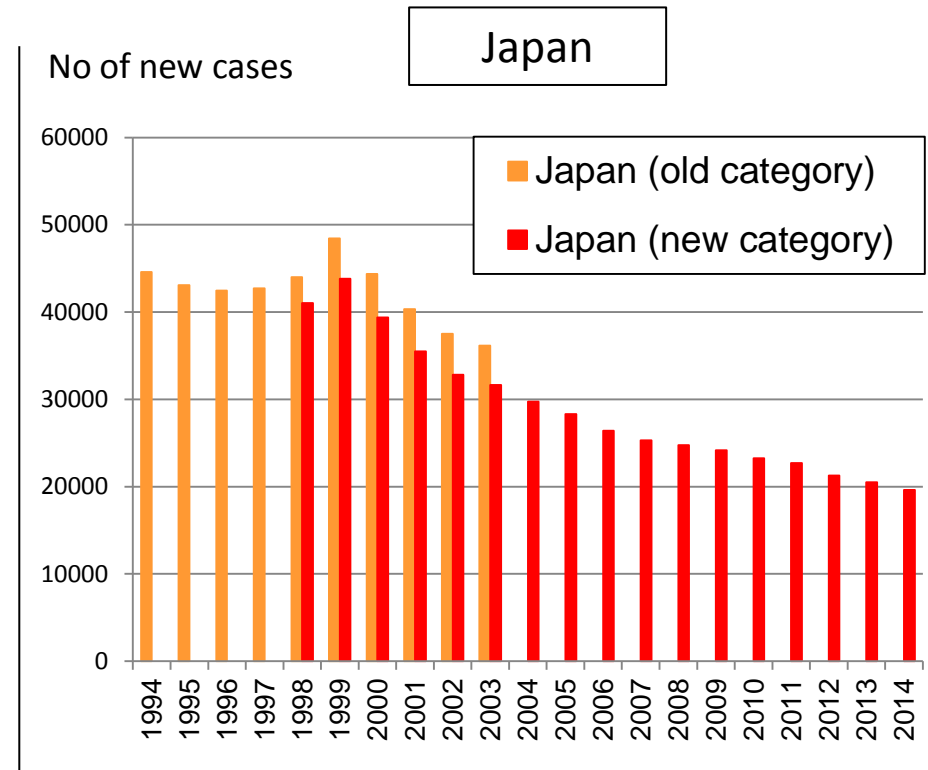
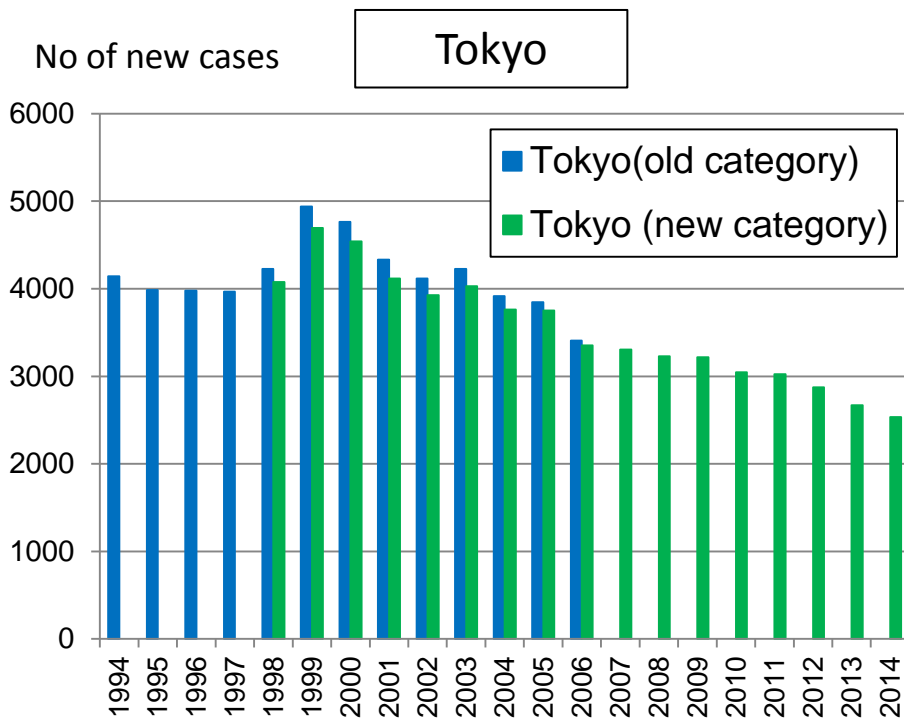


# Providing TB treatment for all TB patients



# Annual Trends in Number of New Cases

- New cases in Tokyo in 2014: 2,533
- New cases in Japan in 2014: 19,615

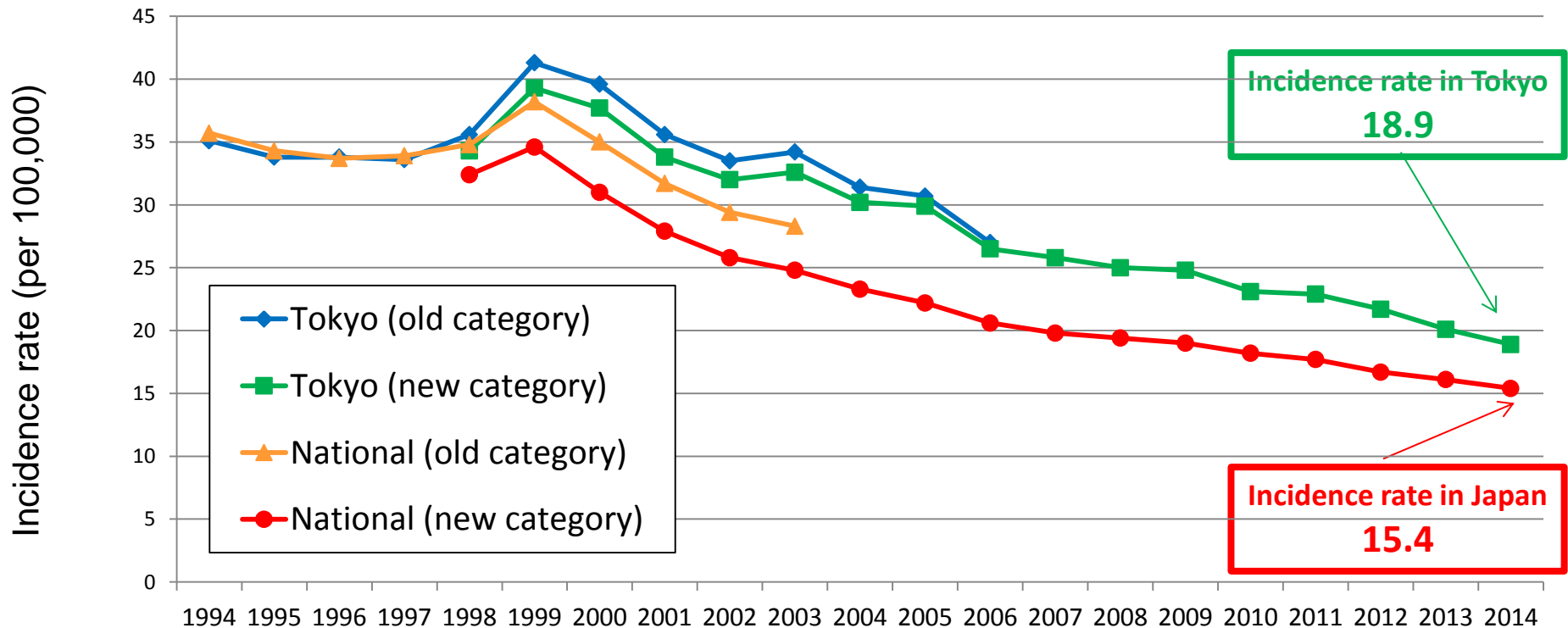


★ Old category includes nontuberculosis mycobacterium, but new category does not

★ Nontuberculosis mycobacterium became non-disclosure since 2004 and excluded from diseases which need notification and registration in Tokyo in 2007.

# Trends in Incidence Rate

- TB incidence rate in Tokyo: 18.9/100,000  
(for the first time to become below 20 since 1994)
- TB incidence rate in Japan: 15.4/100,000
- Continuous decline since 2004 in Tokyo and 2000 in Japan



# TB Incidence Rate

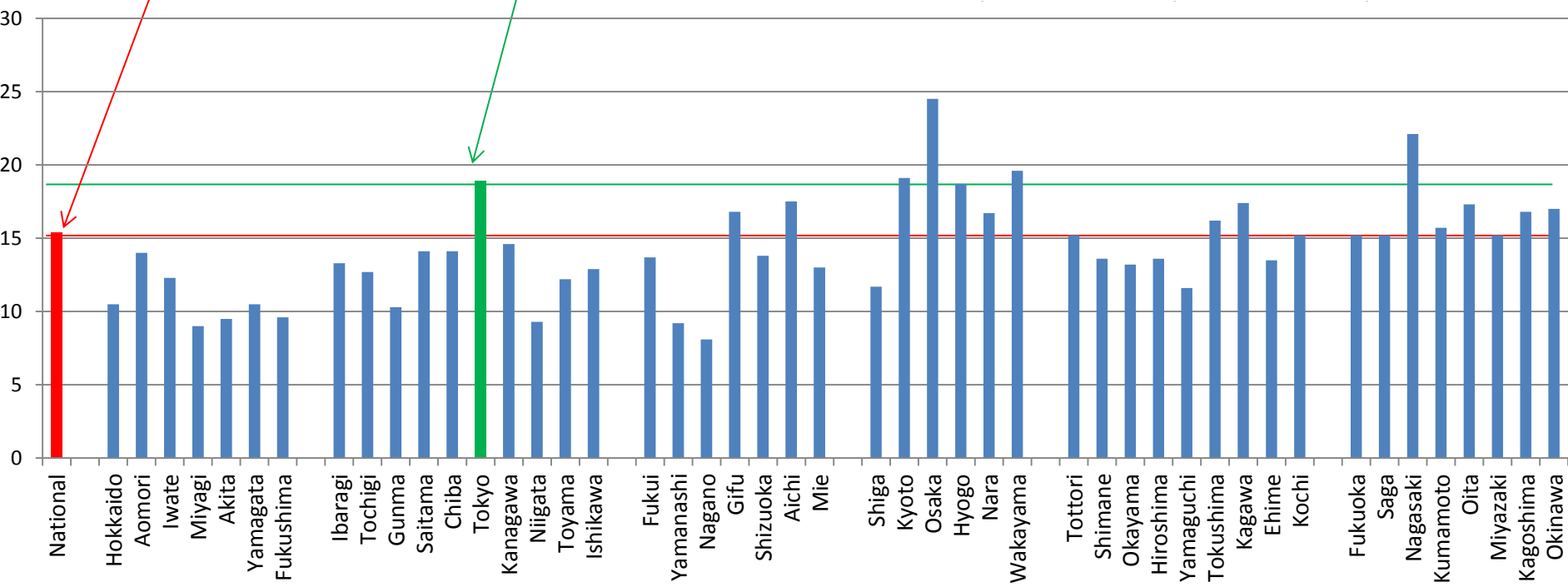
## by Prefectures, Tokyo, Hokkaido, Osaka and Kyoto

Listed in order of higher incidence rate		Listed in order of lower incidence rate	
Osaka	24.5	Nagano	8.1
Nagasaki	22.1	Miyagi	9.0
Wakayama	19.6	Yamanashi	9.2
Kyoto	19.1	Niigata	9.3
Tokyo	18.9	Akita	9.5

**Incidence rate (Japan)**  
**15.4**

**Incidence rate (Tokyo)**  
**18.9**

Incidence rate  
per 100,000

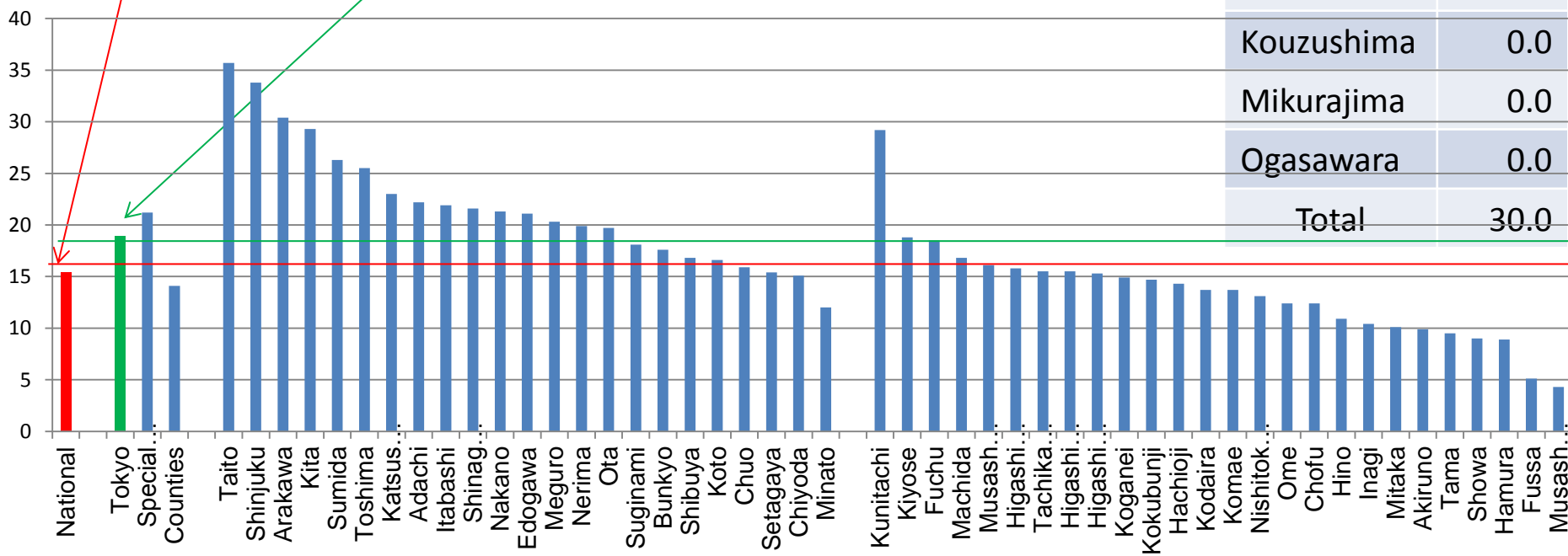


# Incidence rate by special wards (ku), cities, counties and Islands

Incidence rate (Japan)  
**15.4**

Incidence rate (Tokyo)  
**18.9**

Incidence rate  
per 100,000



## Mura and Machi

Hinohara -mura	44.5
Hinode-machi	29.2
Mizuho-machi	6.1
Okutama-machi	0.0
Total	13.9

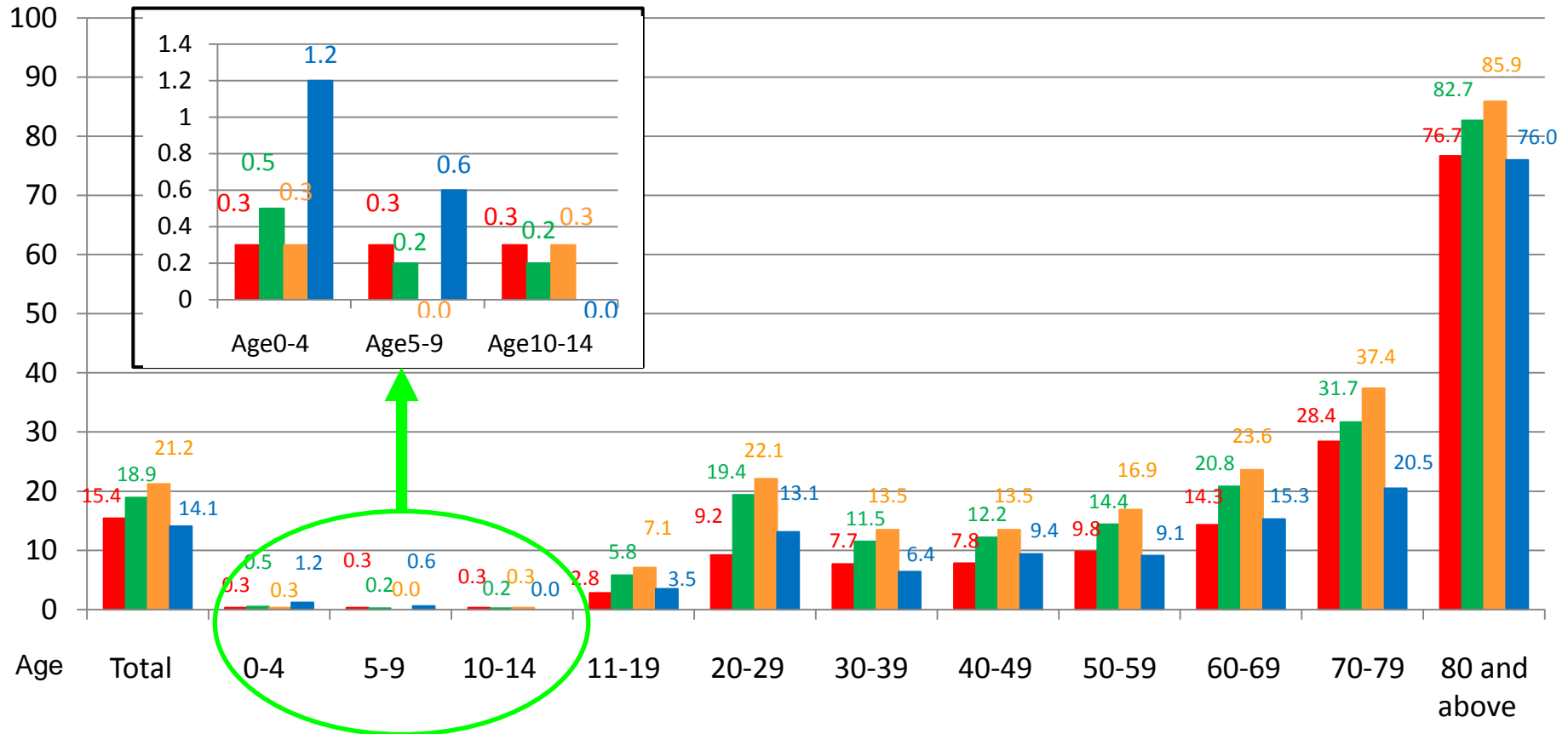
## Islands

Aogasima	526.3
Machijo	51.2
Miyake	39.1
Niijima	36.9
Ooshima	12.5
Toshima	0.0
Kouzushima	0.0
Mikurajima	0.0
Ogasawara	0.0
Total	30.0

# Incidence Rate by Age Groups

All incidence rates by age groups except Age 5-14 are higher than country data

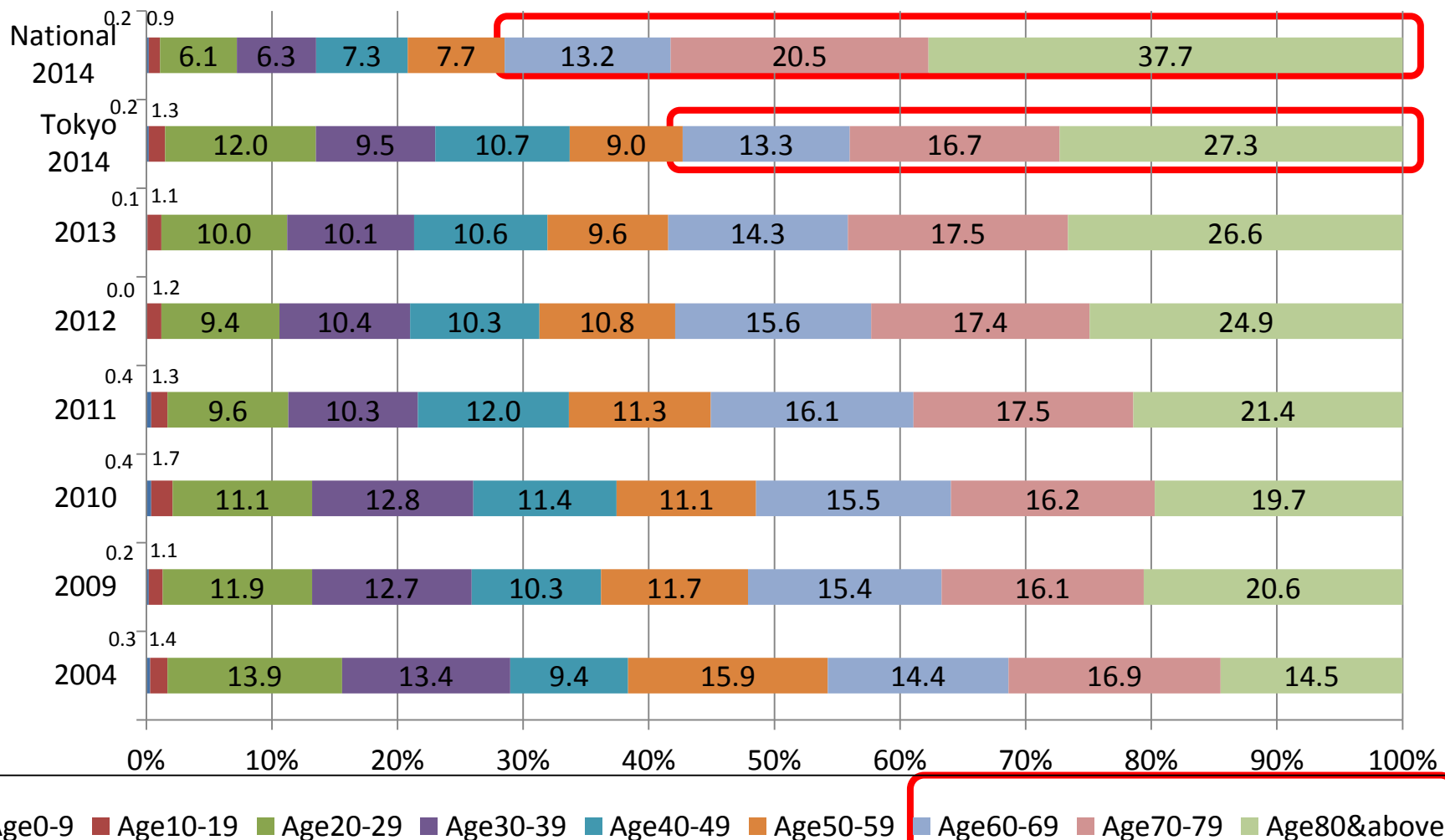
Incidence rate  
per 100,000



■ Japan 
 ■ Tokyo 
 ■ special wards 
 ■ cities, towns, villages

# Trends in Incidence Rate by Age Groups

New cases among elderly people have increased: 60 years and above: 57.3 (Tokyo), 71.4% (Japan)

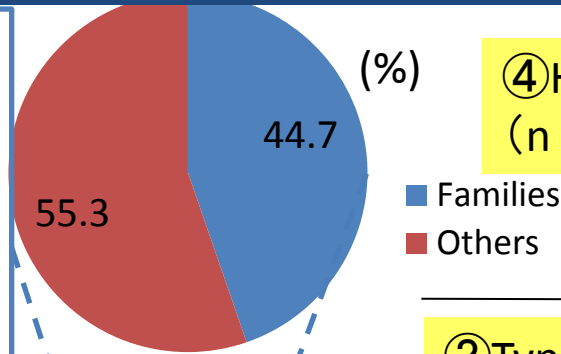
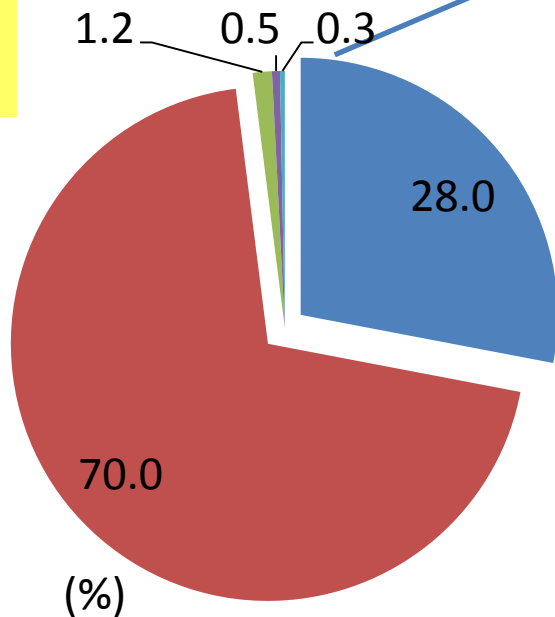


# New Cases and Case Finding Methods

- ① Most case findings were done by symptom screening at medical facilities followed by health checkups
- ② Among health checkups most found by periodical checkups followed by contact screening & individual checkups
- ③ Among periodical checkups most found at work place followed by resident and schools
- ④ Over 40% were found through household screening among contact screening

## ① Case finding methods (n = 2020)

- Health checkups
- Visiting clinics
- Others
- Unknown
- Health checkups

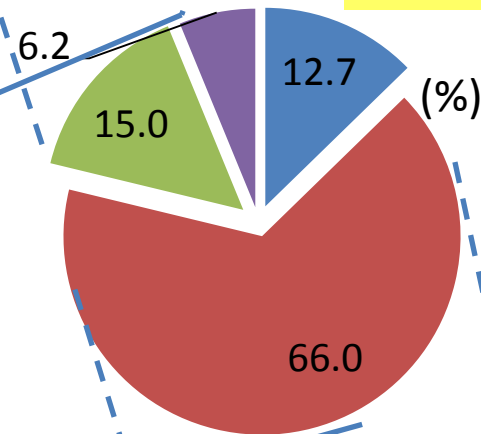


## ④ Household screening (n = 85)

- Families
- Others

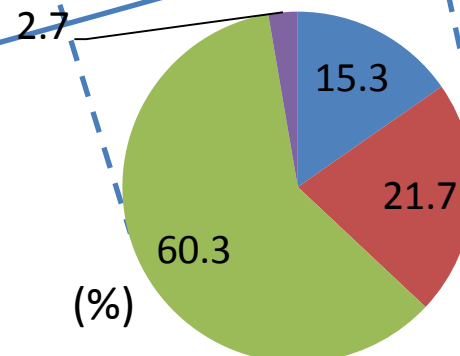
## ② Types of health checkups (n = 565)

- Individual health checkups
- Periodical health checkups
- Contact screening
- Other mass screenings



## ③ Places of health checkups (n = 373)

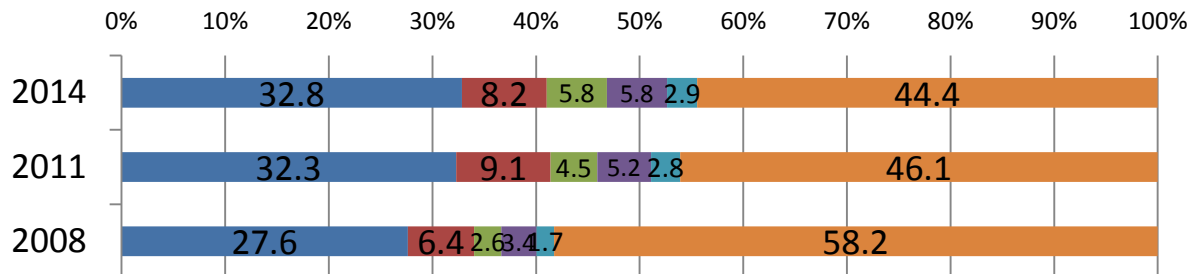
- Schools
- Resident
- Work places
- Institutions





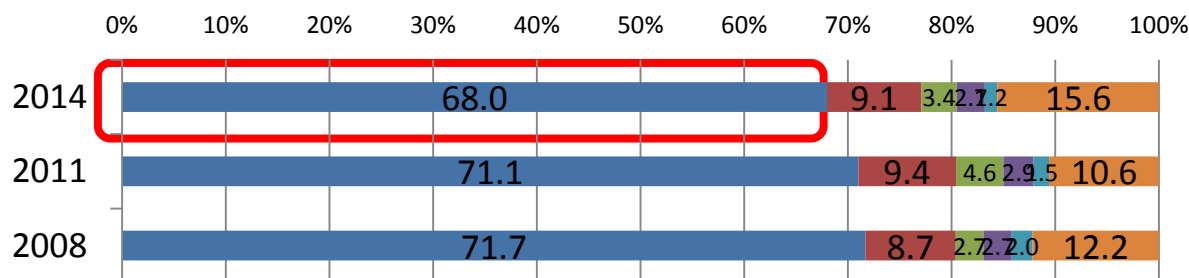
# Time from Onset of Symptoms to Diagnosis

## « Time from onset of symptoms to first visit to the clinics »



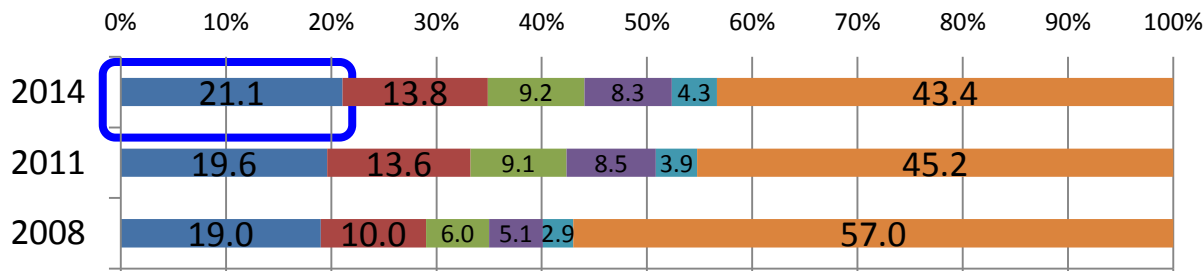
- Time from first visit to the clinics to diagnosis: Less than 1 month- 68.0% (circled in red) Declined by 3.1% compared to the one in 2011

## « Time from first visit to the clinics to diagnosis »



- Time from the onset of diseases to diagnosis: Less than 1 month- 21.1% (circled in blue) No significant change

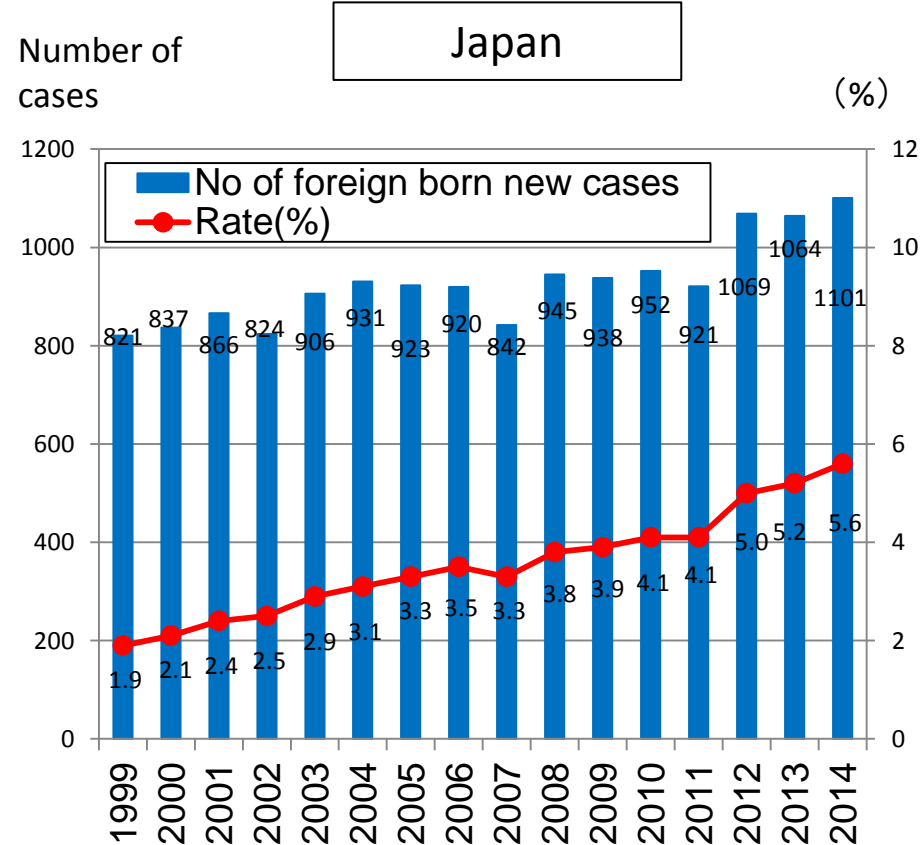
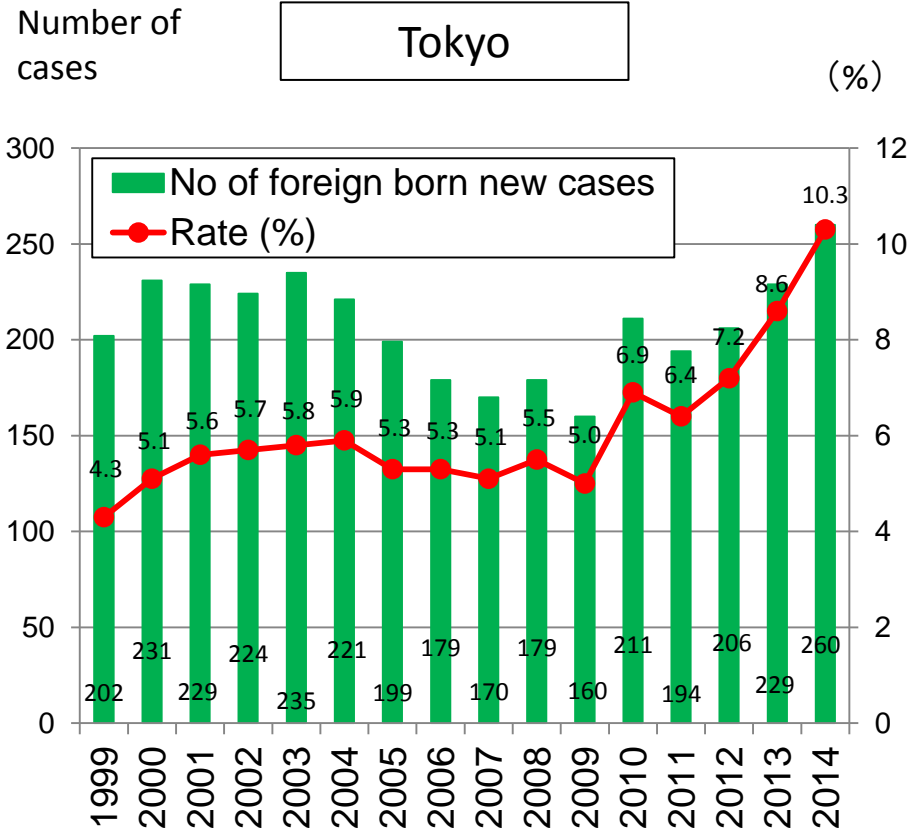
## « Time from onset of symptoms to diagnosis »



■ <1month 
 ■ 1-2month 
 ■ 2-3month 
 ■ 3-6month 
 ■ ≥6months 
 ■ Others or unknown

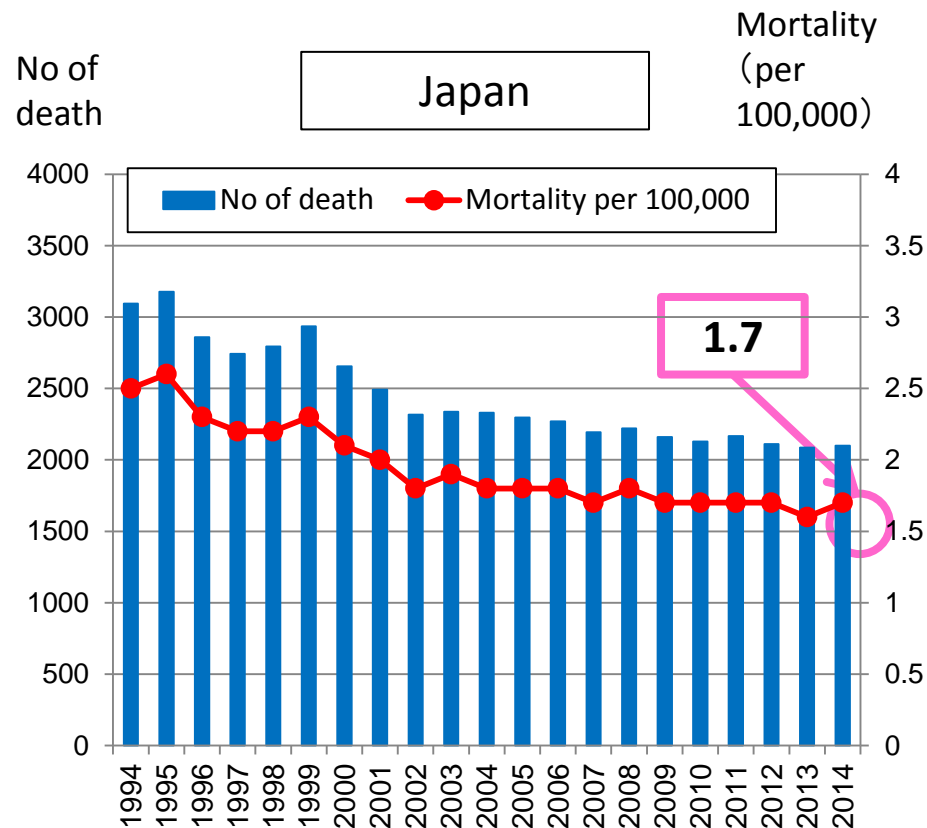
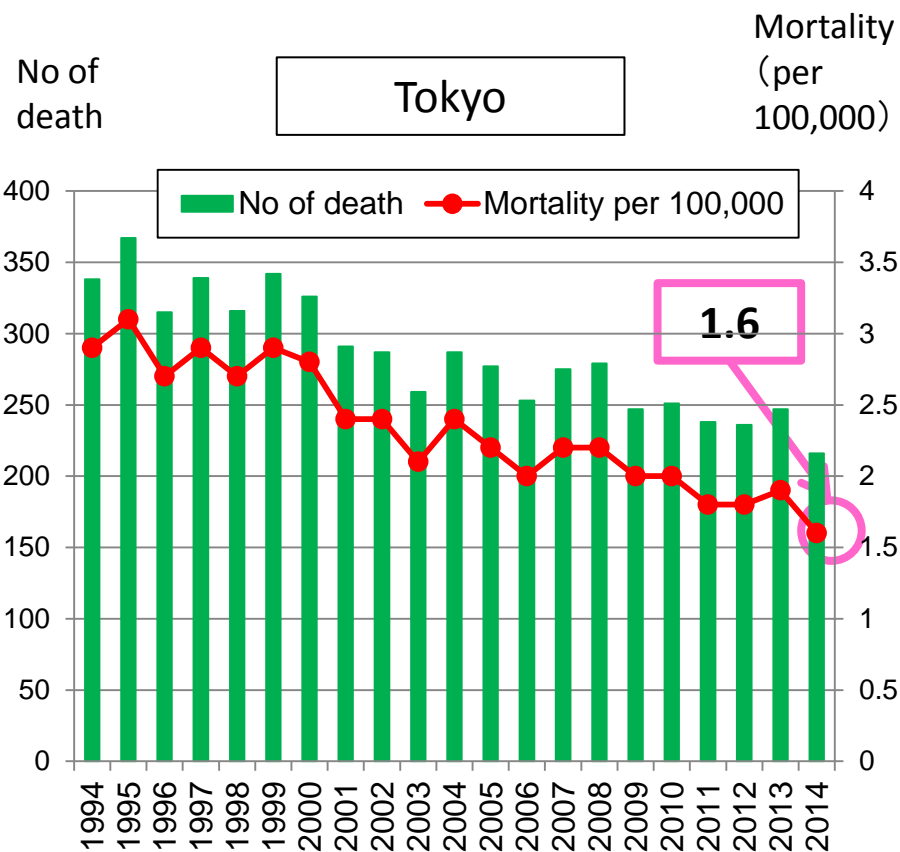
# Trends in Foreign-Born New Cases

- Foreign born people have been increasing among new cases both in Tokyo and Japan
- It has been more remarkable in Tokyo than in Japan



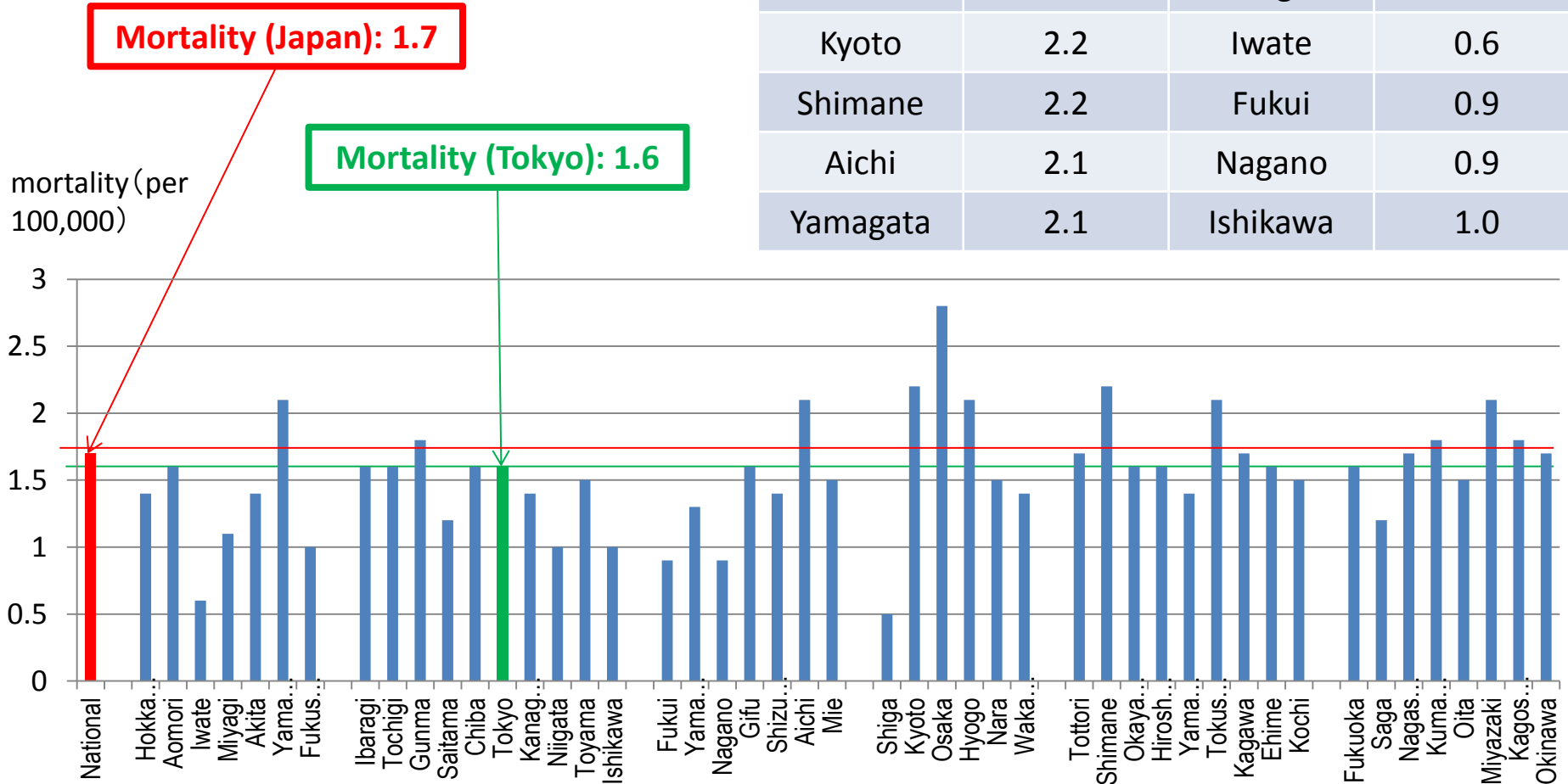
# Trends in number of death and mortality for TB

TB mortality in 2014 in Tokyo was 1.6.  
It was for the first time to become below national data (1.7) since 1994.



# Mortality by Prefectures, Tokyo, Hokkaido, Osaka and Kyoto

Listed in order of higher mortality		Listed in order of lower mortality	
Osaka	2.8	Shiga	0.5
Kyoto	2.2	Iwate	0.6
Shimane	2.2	Fukui	0.9
Aichi	2.1	Nagano	0.9
Yamagata	2.1	Ishikawa	1.0



\* Mortalities were rounded off to one decimal places and further round offs were done in case more than one mortalities showed the same figures

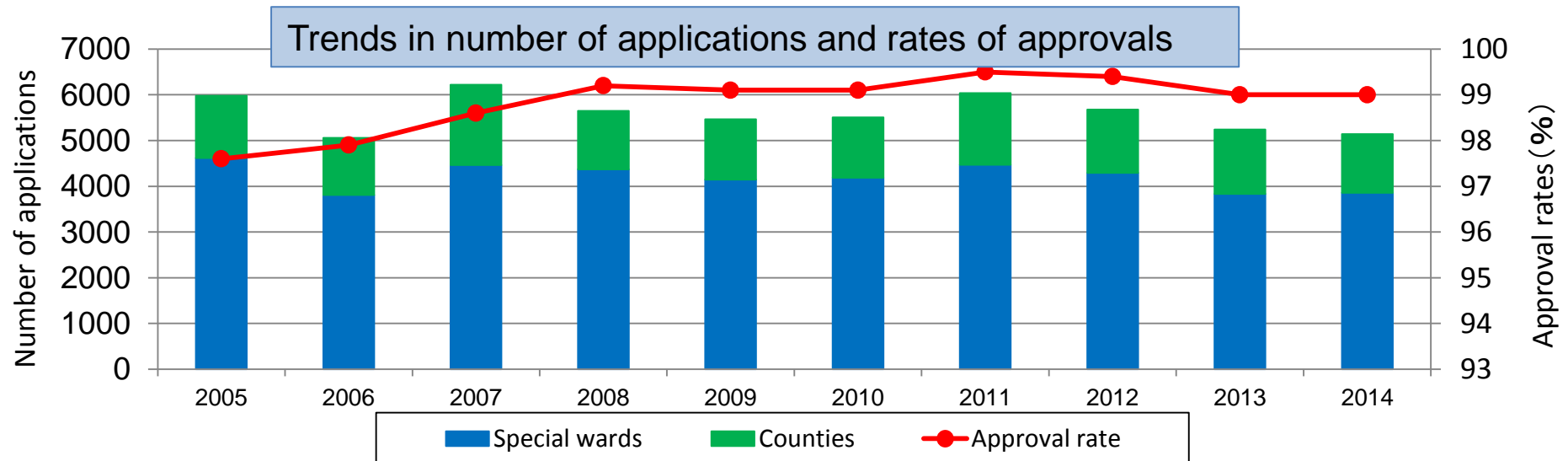
# Public Expenses for TB(1)

## 《Public Expenses under Acts Article 37-2》

Applications for public expenses under Infectious diseases control Acts Article in 2014: Out of 5,139 applications, 5,088 (99% of applications) were approved.

\*37-2 is applicable for TB patients who do not require hospitalization for isolation.

		Total	Special wards	Cities and counties
Applications		5,139	3,856	1,283
Approval		5,088	3,818	1,270
Rejections	Total	51	42	9
	Reasons			
	No need of treatment	38	32	6
	Other diagnosis	13	10	3
Changes in treatment		132	94	38



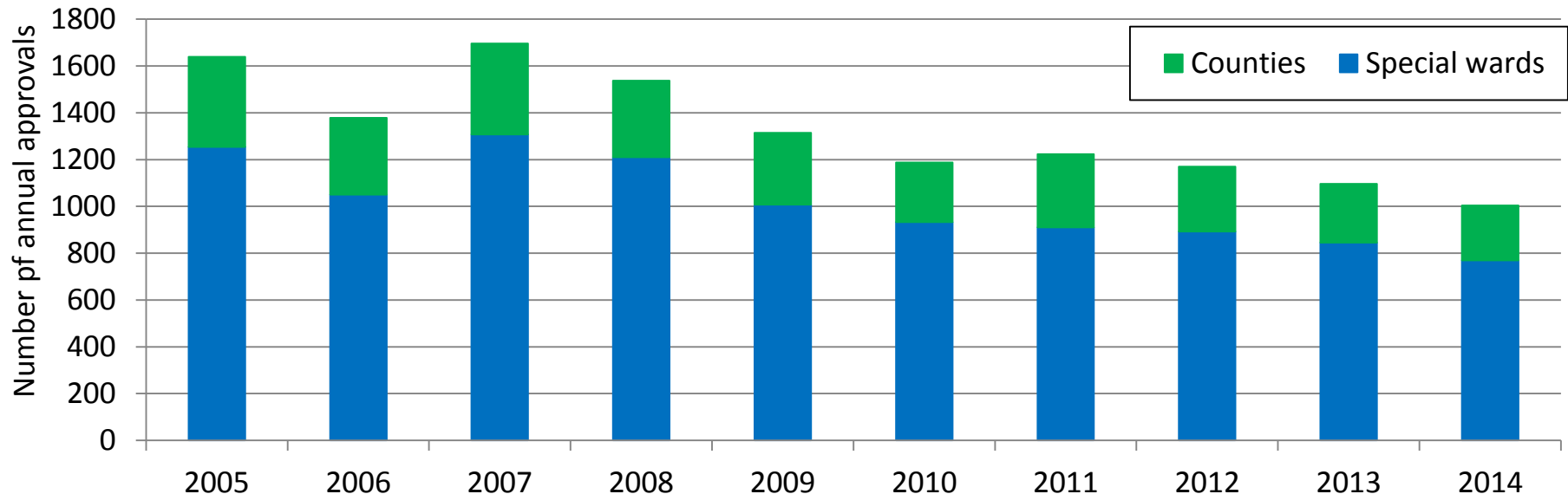
# Public Expenses for TB (2)

## «Hospitalization Advisory»

Number of cases for hospitalization advisory based on infectious diseases control Acts (approved cases): 1,004

	Total	Special wards	Cities and counties
Annual approvals	1,004	769	235

## Trends in approvals for past 10 years



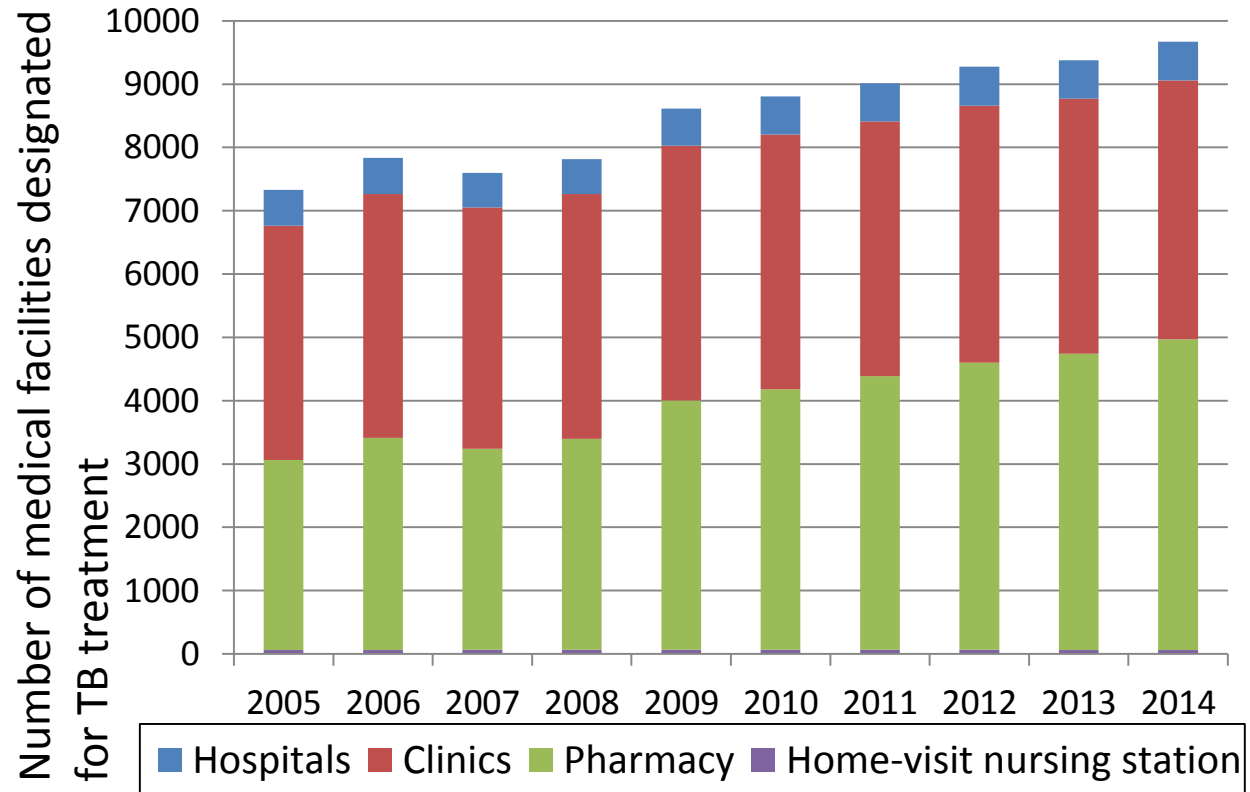
# Public Expenses for TB (3)

## «Medical facilities designated for TB treatment»

Number of medical facilities designated for TB treatment at the end of the fiscal year 2014): 9,671 (circled in red)

Trends in the past 10 years are shown in bar chart below.

Total	Hospitals	Clinics	Pharmacy	Home-visit nursing station
9,671	615	4,089	4,905	62



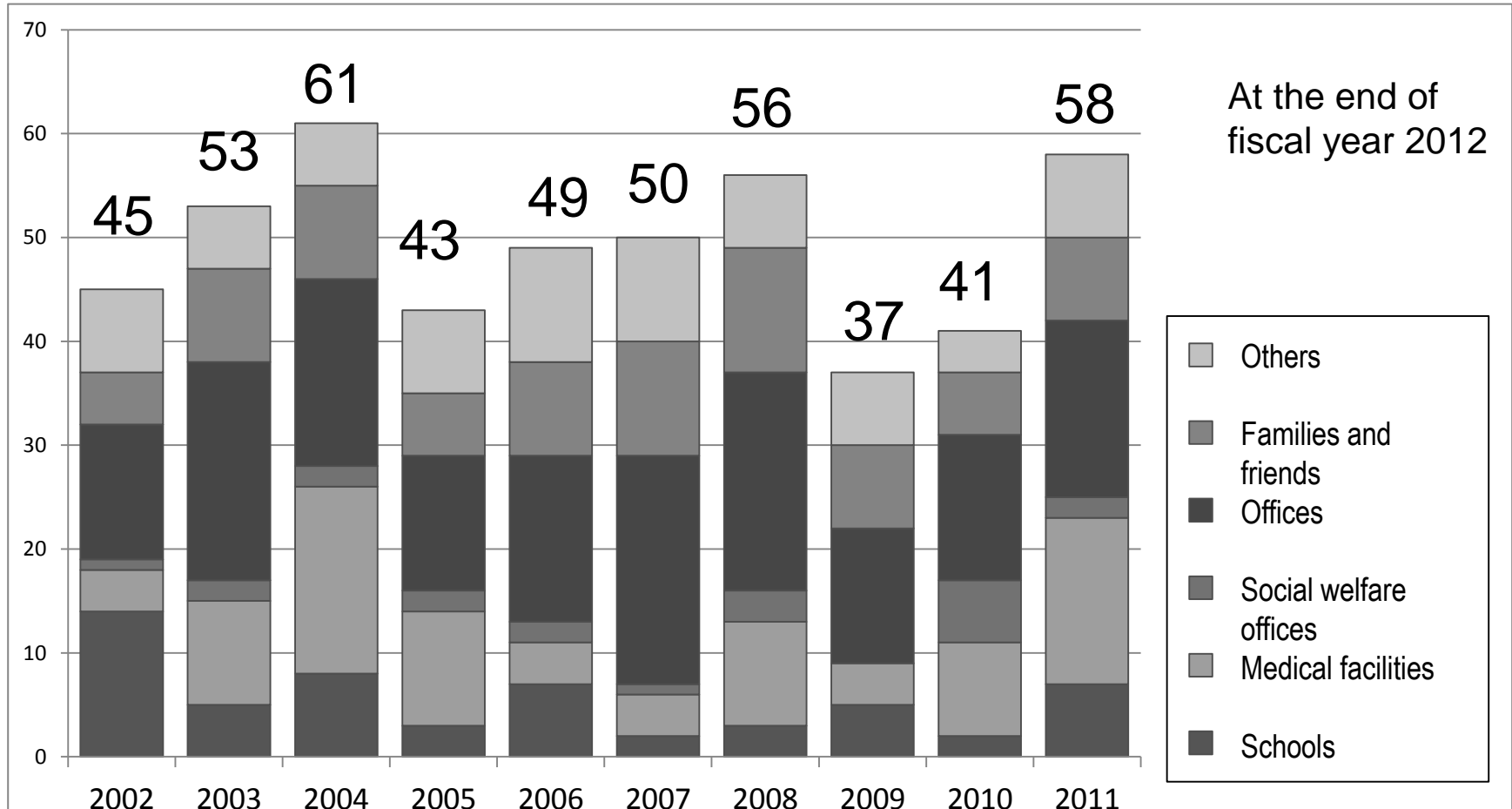
# TB Control Promotion Programs

1	TB screenings at psychiatric hospitals and senior care facilities etc
2	TB control program at 'Sanya community' (An area where homeless people gather and stay.)
3	Human resource system of DOTS supporters for foreigners
4	TB screening for students at Japanese language learning schools



# Trends in Outbreaks of TB in Japan

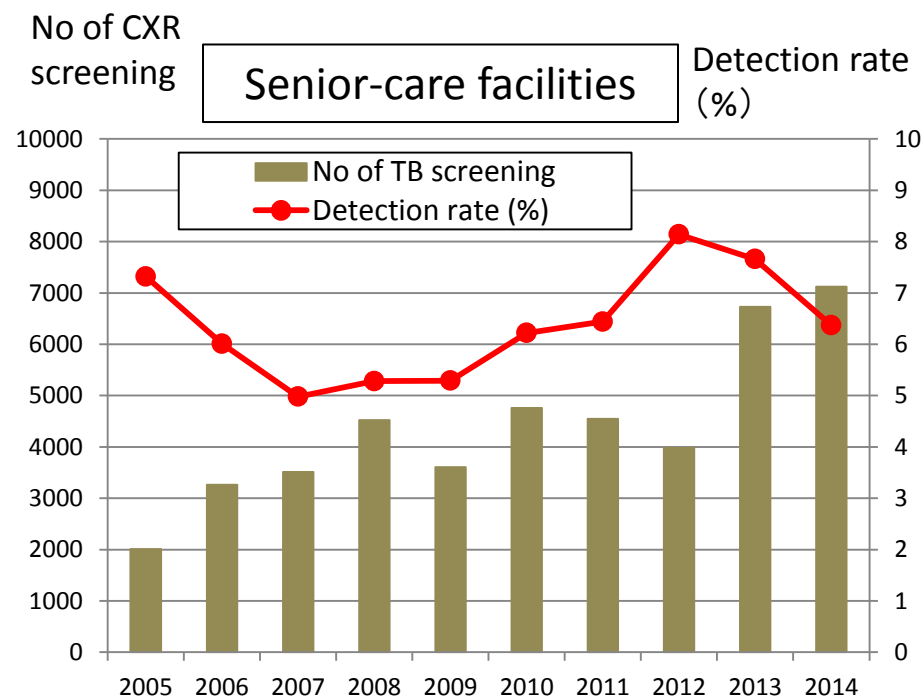
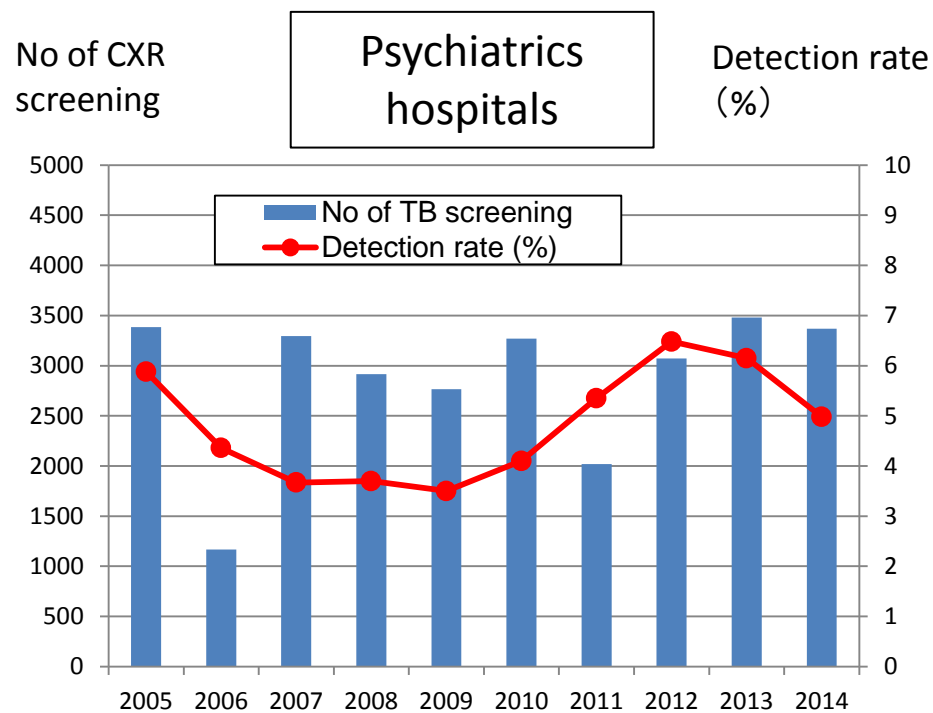
\* If multiple groups are infected by an infection source, each group is counted.



Definition of TB outbreak: 2 or more families and 20 or more people have been infected by one source of infection. (A TB patient is equivalent to 6 LTBI when counting.)

# TB screening for the patients at the psychiatric hospitals and senior care facilities

- Psychiatric hospitals: Chest X-ray exams were done for 3,370 at 21 hospitals. Number of people with abnormal findings (168), Rate of the detection (4.98%) in 2014
- Senior-care facilities: Chest X-ray exams were done for 7,122 at 85 facilities with abnormal findings (454), rate of the detection (6.37%)



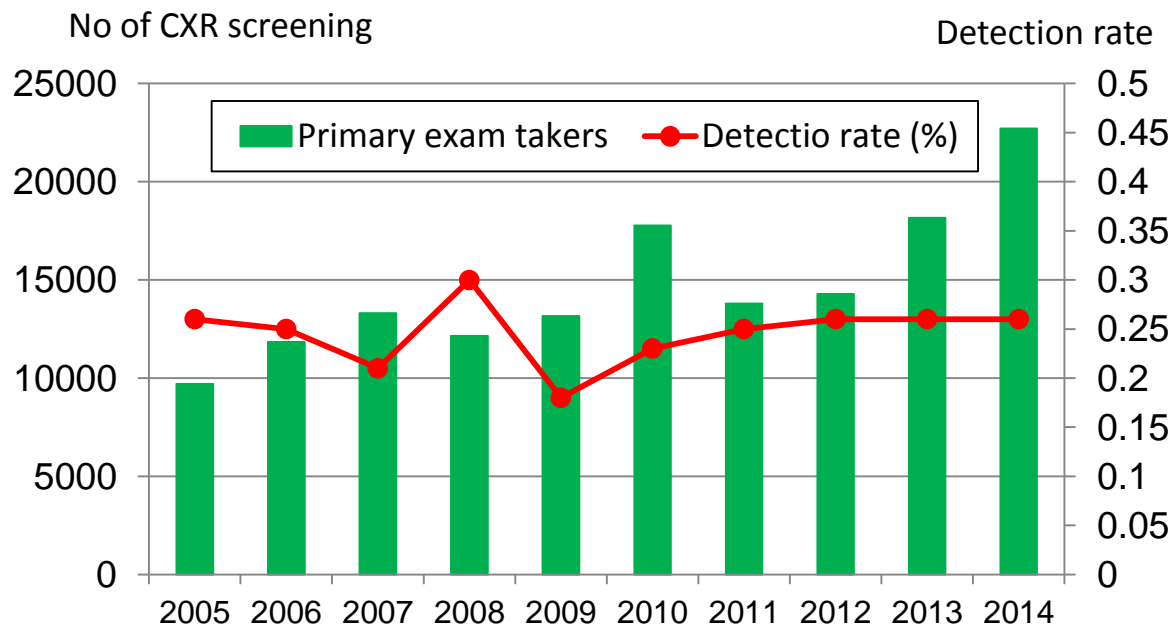
# TB screening for students of Japanese language learning schools

Screenings were done for 22,716 who go to 113 Japanese language learning schools out of 142 \* which applied for primary check-ups.

(\* Approved by Japanese education promoting foundation as of 1st April 2014)

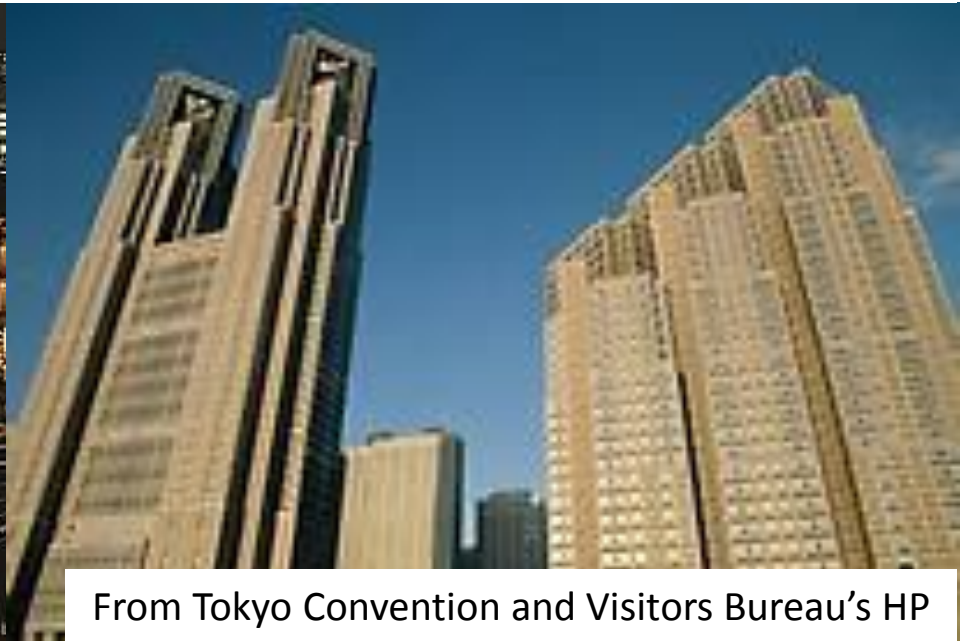
- Results: 60 needed medical consultation, detection rate 0.26%
- Trends in number of people who were examined and detected at the primary screenings are shown in bar chart

Primary exam takers (A)	Those who need follow up exams	Those who went for follow up exams	Those who needed treatment	Detection (A/B)
22,716	250	204	60	0.26%





**Thank you!**



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