## Tuberculosis Annual Report 2009 Series 2. TB in foreigners

## Tuberculosis Surveillance Center, RIT, JATA

**Abstract** Statistics on tuberculosis (TB) in foreigners have been obtained since 1998 in Japan. The number of foreign TB patients increased from 739 in 1998 to 938 in 2009. In contrast, the number of Japanese TB patients decreased during this period and hence the proportion of foreign TB patients increased from 2.1% in 1998 to 4.0% in 2009, excluding those of unknown nationality. Especially, the proportion of those aged 20–29 years increased greatly from 9.1% in 1998 to 25.4% in 2009.

Although the number of nationalities was 38, the majority of patients were from China (28.4%), the Philippines (23.6%) and Korea (13.8%) in 2009.

The number of foreign TB patients aged 20–29 years was 468, accounting for 45.5% of all foreign TB patients in 2009. Eighty-one percent of foreign patients aged 20–29 years had developed TB within 5 years of entering Japan. The equivalent proportion was 49% of those aged 30–39 years and 29% of those aged 40–49 years. Regarding occupation, 37.2% of foreign patients aged 20–29 years were students, 27.2% were full-time workers and 11.7% were part-time workers.

**Key words:** Tuberculosis, Foreigner, Nationality, Sex-age specific, Trend, Regional distribution, Occupation

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Table 1 Trend of newly notified foreigners with TB by calendar year and sex, 1998-2008

Year	Notified		Nationality	Foreigners	Se	Ratio of		
	patients	Japanese	Foreigners	Unknown	(%)	Male	Female	F/M
1998	41,033	34,382	739	5,912	2.1	365	374	1.0
1999	43,818	37,094	821	5,903	2.2	415	406	1.0
2000	39,384	33,720	837	4,827	2.4	436	401	0.9
2001	35,489	30,305	866	4,318	2.8	442	424	1.0
2002	32,828	28,667	824	3,337	2.8	411	413	1.0
2003	31,638	27,665	906	3,067	3.2	433	473	1.1
2004	29,736	26,205	931	2,600	3.4	479	452	0.9
2005	28,319	25,247	923	2,149	3.5	438	485	1.1
2006	26,384	23,505	920	1,959	3.8	444	476	1.1
2007	25,311	23,451	842	1,018	3.5	364	478	1.3
2008	24,760	23,163	945	652	3.9	416	529	1.3
2009	24,170	22,808	938	424	4.0	414	524	1.3

Proportion of foreigners with TB: excluding those of unknown nationality

Table 2 Trend of newly notified foreigners with TB by calendar year and age group, 1998-2009

Year	All	Age group								
Teal	foreigners	0-14	15-19	20-29	30-39	40-49	50-59	60+	of 20–29 yrs	
1998	739	11	15	300	215	83	44	71	40.6%	
1999	821	13	25	319	241	89	54	80	38.9	
2000	837	16	24	357	235	92	49	64	42.7	
2001	866	6	15	361	249	110	55	70	41.7	
2002	824	6	23	345	249	81	47	73	41.9	
2003	906	12	22	399	268	98	38	69	44.0	
2004	931	6	30	402	250	107	59	77	43.2	
2005	923	9	33	378	273	105	62	63	41.0	
2006	920	6	33	409	234	113	59	66	44.5	
2007	842	9	32	390	224	102	43	42	46.3	
2008	945	5	26	468	237	114	41	54	49.5	
2009	938	3	49	427	243	103	41	72	45.5	

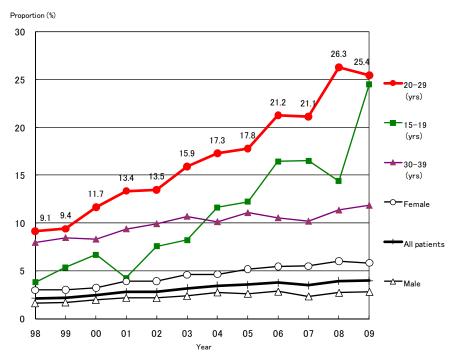


Fig. 1 Trend in proportion of foreigners among newly notified TB patients by age group, 1998-2009

Proportion: excluding those of unknown nationality

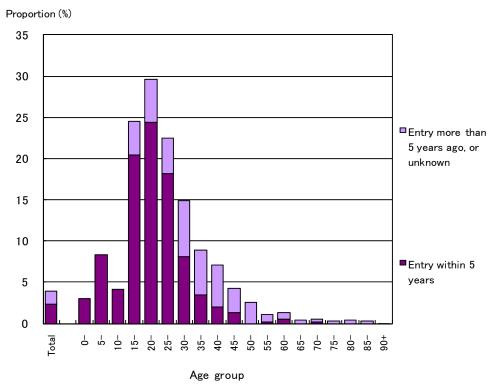


Fig. 2 Proportion of foreigners by age group and time of entry to Japan, 2009

Table 3 Number and proportion of foreigners by country and time of entry to Japan, 2009

Т	「otal		Entry wit	hin 5 yearrs	Entry more than 5 years ago, or unknown			
Total	938	100%	Total	558	100%	Total	380	100%
China	266	28.4	China	203	36.4	Philippines	113	29.7
Philippines	221	23.6	Philippines	108	19.4	Korea	82	21.6
Korea	129	13.8	Korea	47	8.4	China	63	16.6
Indonesia	50	5.3	Indonesia	44	7.9	Brazil	21	5.5
Vietnam	44	4.7	Vietnam	34	6.1	Peru	14	3.7
Brazil	30	3.2	Nepal	25	4.5	Vietnam	10	2.6
Nepal	28	3.0	Myanmar	16	2.9	India	10	2.6
Myanmar	20	2.1	Mongolia	11	2.0			
India	19	2.0						
Peru	17	1.8						
Thailand	13	1.4						
Mongolia	11	1.2						
Others	44	4.7	Others	54	9.7	Others	37	9.7
Unknown	46	4.9	Unknown	16	2.9	Unknown	30	7.9

Name of country with ten or more nationals having TB

Table 4 Regional distribution of foreigners with TB by prefecture and designated city, 2009

	Newly notified patients	Foreigners	Proportion (%)	Major country (Number of cases)			
Japan	24,170	938	3.9	China (266)			
Gunma	204	28	13.7	Brazil (9)			
Chiba city	211	20	9.5	Korea/Philippines (7/7)			
Hamamatsu city	169	16	9.5	Philippines (7)			
Fukui	126	9	7.1	Philippines (4)			
Okayama city	126	9	7.1	China (7)			
Sendai city	143	10	7.0	China (4)			
Nagoya city	701	49	7.0	Philippines (12)			
Fukuoka city	280	19	6.8	China (10)			
Yamanashi	95	6	6.3	Korea/Philippines (2/2)			
Kawasaki city	329	19	5.8	China (6)			
Tochigi	261	15	5.7	Philippines (3)			
Aichi	957	54	5.6	Philippines (19)			
Shizuoka	324	18	5.6	Philippines (7)			
Hiroshima	308	17	5.5	Philippines (7)			
Mie	312	17	5.4	Philippines (5)			
Yokohama city	720	39	5.4	China (14)			
Kagawa	205	11	5.4	China (4)			
Okayama	206	11	5.3	China (6)			
Shizuoka city	120	6	5.0	Indonesia/Myanmar/Philippines (2/2/2)			
Tokyo	3,219	160	5.0	China (48)			

Showing prefectures/designated cities with 5% or more of foreigners having TB. Excluding city from prefecture.

Table 5 Occupation of foreigners with TB by age group, 2009

Age group	Total	Service workers	Medical workers	Teachers /Nursery nurses	Babies/ Children	Students	Other regular workers	Other temporar y/daily workers	Other self- employed	eners	Jobless/ Others	Unknown
Total	938	70	4	2	3	209	220	115	19	76	187	33
Mail	414	30	2	1	2	108	134	48	8	_	73	8
Femail	524	40	2	1	1	101	86	67	11	76	114	25
0-14	3	-	-	-	3	-	-	-	-	-	-	-
15-19	49	2	-	-	-	31	3	6	-	1	5	1
20-24	204	8	-	-	-	98	44	24	1	4	21	4
25-29	223	13	-	-	-	61	72	26	4	17	26	4
30-34	152	16	3	-	-	15	34	27	3	20	25	9
35-39	91	11	1	2	-	4	22	12	2	14	16	7
40-44	66	11	-	-	-	-	17	5	2	9	19	3
45-49	37	5	-	-	-	-	9	5	-	7	10	1
50-54	26	3	-	-	-	-	8	3	2	3	7	-
55-59	15	-	-	-	-	-	7	2	1	1	3	1
60+	72	1	_	_	_	_	4	5	4	_	55	3