

【Case Finding】

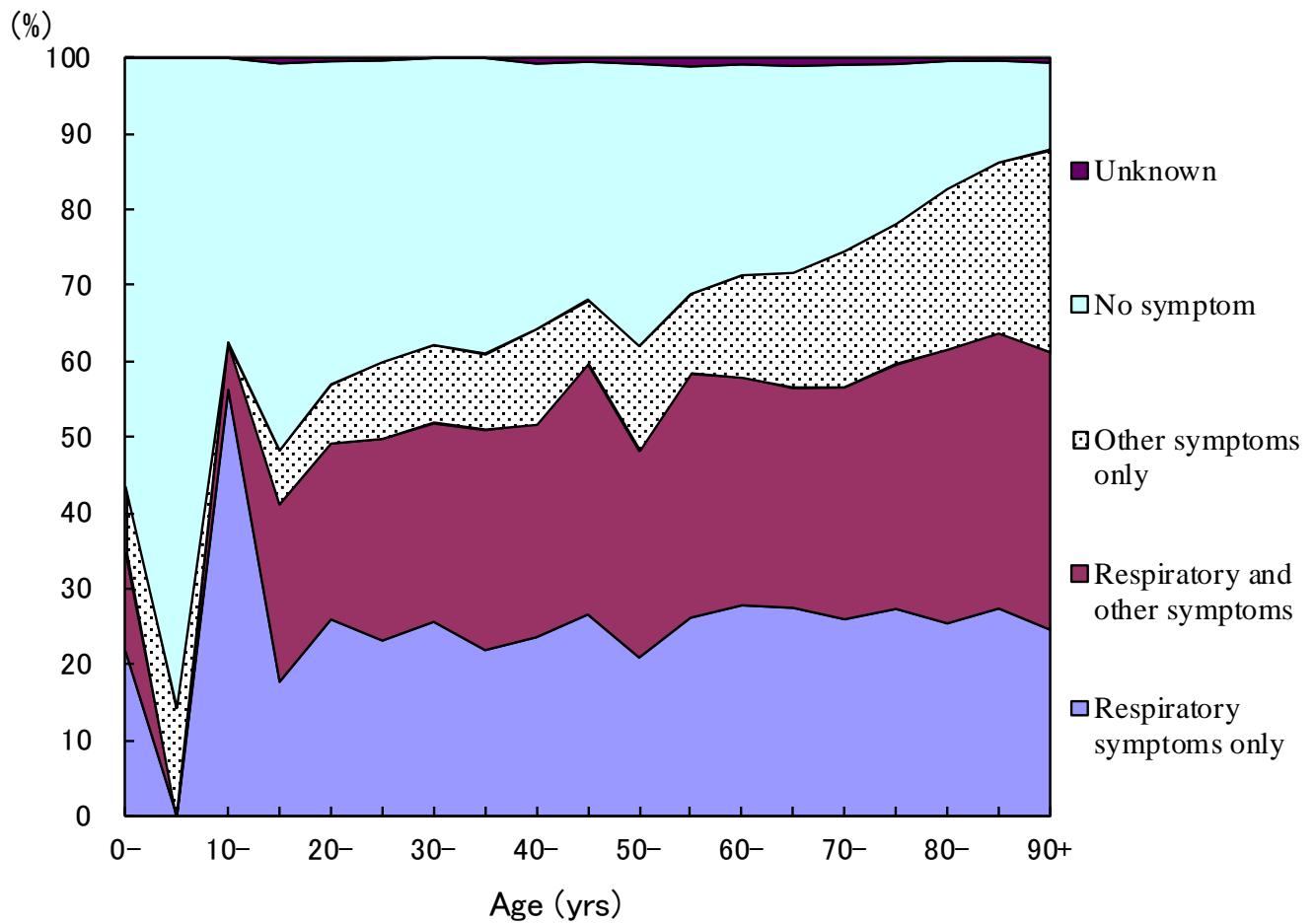


Fig.1 Proportion of symptoms among newly notified pulmonary tuberculosis patients by 5 years age group, in 2012

Respiratory symptoms include cough, sputum expectoration, bloody sputum, and hemoptysis. Other symptoms include wheezing, chest pain, back pain, dyspnea, fever, night sweating, fatigue tendency, and weight loss.

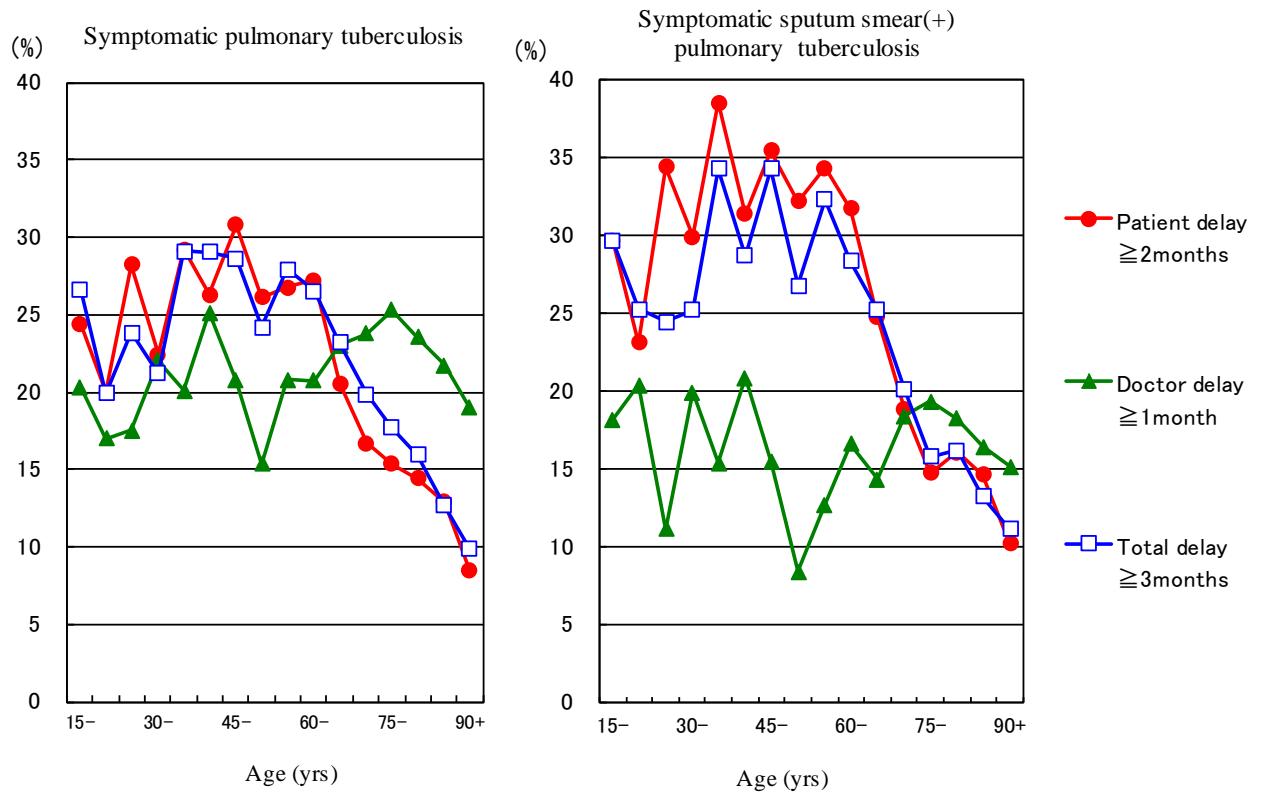


Fig.2 Proportion of patient delay, doctor delay and total delay among symptomatic pulmonary tuberculosis patients by 5-year age group, in 2012

Patient delay : The amount of time between the onset of symptoms and the initial consultation visit to a medical institution is 2 months or more.

Doctor delay : The amount of time between the initial consultation visit of the patient to a medical institution and the diagnosis of tuberculosis is 1 month or more.

Total delay : The amount of time between the onset of symptoms and the diagnosis of tuberculosis is 3 months or more.

Table1 Proportion of mode of detection among newly notified tuberculosis patients, 1998-2012

Year	Newly notified TB patients	Individual medical checkup	Mass screening				Contact examination		Medical institutions					
			Schools	Residents	Employees	Facilities	Family	Others	Outpatients with TB symptoms(*1)	Inpatients with other diseases	Outpatients with other diseases	Others	Unknown	
	n	%	%	%	%	%	%	%	%	%	%	%	%	
1998	41,033	2.6	1.0	3.8	7.6	0.4	1.5	1.2	78.3	-	-	2.7	1.0	
1999	43,818	2.6	0.9	3.4	7.6	0.5	1.5	1.4	78.5	-	-	2.9	0.8	
2000	39,384	2.3	1.1	3.6	8.3	0.5	1.4	1.2	78.3	-	-	2.8	0.5	
2001	35,489	2.4	1.1	3.5	8.2	0.5	1.4	1.3	78.6	-	-	2.7	0.3	
2002	32,828	2.1	1.1	3.2	8.0	0.6	1.4	1.5	78.7	-	-	2.9	0.5	
2003	31,638	2.0	1.0	2.8	7.7	0.6	1.4	1.4	79.7	-	-	2.9	0.5	
2004	29,736	2.1	1.0	2.8	7.4	0.6	1.3	1.6	79.6	-	-	2.8	0.9	
2005	28,319	2.1	0.9	2.4	7.3	0.5	1.4	1.7	80.4	-	-	2.4	0.9	
2006	26,384	2.1	0.9	2.3	7.6	0.6	1.3	1.2	81.2	-	-	2.5	0.5	
2007	25,311	2.1	0.9	2.5	7.6	0.6	1.4	1.5	67.2	8.0	6.4	1.3	0.6	
2008	24,760	2.6	0.8	2.0	7.6	0.6	1.3	1.7	62.0	10.8	8.5	1.3	1.0	
2009	24,170	2.5	0.8	2.3	7.2	0.6	1.3	1.3	61.5	11.4	9.2	1.2	0.6	
2010	23,261	2.2	1.0	2.3	7.0	0.6	1.3	1.5	59.8	12.0	9.9	1.4	1.0	
2011	22,681	2.1	0.8	2.2	6.8	0.6	1.6	2.1	58.1	12.9	11.1	1.5	0.4	
2012	21,283	1.9	0.8	2.3	6.7	0.6	1.5	1.8	57.7	13.8	10.9	1.7	0.4	

TB: tuberculosis

TB symptoms: Respiratory symptoms such as cough, sputum expectoration, bloody sputum, and hemoptysis; and other symptoms such as wheezing, chest pain, back pain, dyspnea, fever, night sweating, fatigue tendency, and weight loss.

Previous table Proportion of mode of detection among newly notified TB patients by age group, 2012

Age groups	Newly notified TB patients	Individual medical checkup	Mass screening				Contact examination		Medical institutions				Others	Unknown
			School	Residents	Employees	Facilities	Family	Others	Outpatients with TB symptoms(*1)	Inpatients with other diseases	Outpatients with other diseases			
			n	%	%	%	%	%	%	%	%	%		
All forms of TB														
Total	21,283	1.9	0.8	2.3	6.7	0.6	1.5	1.8	57.7	13.8	10.9	1.7	0.4	
0-14	63	0.0	1.6	0.0	0.0	0.0	50.8	6.3	33.3	1.6	0.0	6.3	0.0	
15-19	165	3.0	28.5	0.0	3.0	0.0	6.1	7.3	42.4	2.4	0.6	6.1	0.6	
20-24	568	3.2	13.0	0.0	15.5	0.0	3.9	6.2	51.2	0.7	0.9	4.8	0.7	
25-29	720	2.5	4.2	0.0	23.9	0.3	2.8	5.1	52.9	1.9	2.8	3.2	0.4	
30-34	712	1.0	0.7	0.4	24.3	0.3	2.8	3.7	60.7	1.7	2.8	1.4	0.3	
35-39	816	1.8	0.2	0.5	24.8	0.6	2.5	4.2	57.5	1.7	4.2	1.7	0.4	
40-44	850	3.8	0.1	3.2	19.2	0.5	2.1	4.7	56.8	2.8	4.8	1.3	0.7	
45-49	750	3.3	0.1	2.4	20.4	0.4	1.5	2.3	56.0	4.8	6.5	1.9	0.4	
50-54	789	3.4	0.0	2.5	19.5	1.3	2.9	3.5	53.5	4.6	7.4	1.4	0.0	
55-59	1,006	3.2	0.0	1.9	13.9	1.0	1.7	2.9	55.6	8.4	8.0	2.5	1.0	
60-64	1,537	2.8	0.1	3.9	7.2	0.5	1.7	1.8	56.0	10.0	13.9	2.0	0.2	
65-69	1,475	2.2	0.0	4.6	3.0	0.3	1.8	0.9	56.0	12.6	15.5	2.6	0.5	
70-74	1,984	2.5	0.0	4.0	0.6	0.3	0.8	1.0	57.7	15.8	15.4	1.7	0.2	
75-79	2,611	1.5	0.0	3.6	0.2	0.5	0.7	0.6	58.1	18.1	15.5	0.9	0.3	
80-84	3,100	1.0	0.0	2.0	0.0	0.4	0.6	0.6	58.2	20.8	14.7	1.2	0.4	
85-89	2,653	0.9	0.0	1.2	0.1	0.8	0.5	0.3	61.2	22.2	11.3	1.1	0.5	
90+	1,484	0.7	0.0	0.7	0.0	1.5	0.2	0.5	64.8	23.7	6.5	1.1	0.5	
(Re-count) Sputum smear positive pulmonary TB														
Total	8,237	1.2	0.3	1.7	3.9	0.4	0.5	0.6	65.4	14.7	9.6	1.4	0.3	
0-14	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	20.0	0.0	
15-19	40	7.5	15.0	0.0	2.5	0.0	2.5	7.5	62.5	0.0	0.0	2.5	0.0	
20-24	144	2.1	7.6	0.0	13.9	0.0	0.7	0.7	69.4	0.0	0.7	4.9	0.0	
25-29	193	1.6	1.6	0.0	14.5	0.0	0.5	1.0	75.1	1.0	1.6	2.6	0.5	
30-34	212	1.4	0.5	0.0	17.0	0.5	1.9	0.5	75.0	0.5	1.9	0.9	0.0	
35-39	236	1.3	0.0	0.4	18.6	0.4	0.0	1.3	72.0	0.0	5.1	0.8	0.0	
40-44	273	4.4	0.0	3.7	10.3	0.4	1.8	1.1	70.7	2.9	2.2	1.5	1.1	
45-49	282	2.5	0.0	1.4	16.7	1.1	0.4	0.7	66.7	3.9	5.3	1.1	0.4	
50-54	283	1.1	0.0	1.1	14.1	1.8	1.4	1.1	67.1	4.2	6.4	1.8	0.0	
55-59	397	2.0	0.0	1.3	9.1	0.3	0.5	1.8	69.5	7.6	5.3	2.0	0.8	
60-64	592	1.2	0.2	2.7	4.7	0.0	0.5	0.5	67.9	9.8	10.3	1.9	0.3	
65-69	569	1.1	0.0	2.6	1.4	0.0	1.4	1.1	63.8	12.8	13.4	2.5	0.0	
70-74	757	1.1	0.0	3.0	0.8	0.1	0.3	0.5	67.1	13.3	12.0	1.6	0.1	
75-79	1,044	1.1	0.0	2.6	0.2	0.3	0.2	0.4	60.3	20.4	13.3	1.0	0.3	
80-84	1,315	0.9	0.0	1.7	0.0	0.4	0.5	0.2	59.5	21.8	13.9	1.0	0.1	
85-89	1,217	0.6	0.0	0.9	0.1	0.5	0.2	0.2	65.2	20.9	9.9	1.0	0.5	
90+	678	0.6	0.0	0.3	0.0	1.2	0.0	0.3	67.1	23.9	5.5	1.0	0.1	

TB: tuberculosis

TB symptoms: Respiratory symptoms such as cough, sputum expectoration, bloody sputum, and hemoptysis; and other symptoms such as wheezing, chest pain, back pain, dyspnea, fever, night sweating, fatigue tendency, and weight loss.

Previous table Number of newly notified TB patients by occupation, sex and age group, 2012

Sex/Age group	Total	Service workers	Nurses/ Public health nurses	Medical doctors	Other medical workers	Teachers/Nursery nurses	Pupils/Students	Other regular workers	Other temporary/daily workers	Other self-employed	Housekeepers	Infants/Little children	Jobless/Others	Unknown
Male	12,988	343	16	56	77	37	252	2,283	487	785	15	19	8,342	276
0-14	34	-	-	-	-	-	14	-	-	-	-	19	1	-
15-19	93	-	-	-	-	-	68	11	4	-	-	-	9	1
20-24	292	23	2	-	7	-	117	104	13	3	-	-	18	5
25-29	382	42	4	6	15	1	40	179	30	11	-	-	41	13
30-39	833	83	6	8	22	11	9	459	45	51	-	-	122	17
40-49	1,011	53	2	3	14	8	2	515	78	92	-	-	219	25
50-59	1,294	56	1	20	12	5	1	549	101	126	1	-	393	29
60-69	2,124	55	-	4	6	12	1	380	140	234	1	-	1,210	81
70-79	2,931	28	1	3	1	-	-	75	71	186	5	-	2,515	46
80+	3,994	3	-	12	-	-	-	11	5	82	8	-	3,814	59
Female	8,295	226	278	6	203	37	182	685	260	143	497	13	5,607	158
0-14	29	-	-	-	-	-	16	-	-	-	-	13	-	-
15-19	72	1	-	-	-	-	59	7	2	-	-	-	3	-
20-24	276	25	15	-	12	4	69	78	20	1	10	-	35	7
25-29	338	35	34	-	20	7	29	110	20	4	29	-	40	10
30-39	695	59	99	3	46	6	8	172	56	12	87	-	116	31
40-49	589	37	67	1	57	6	1	142	59	18	63	-	117	21
50-59	501	24	48	-	41	10	-	101	44	21	58	-	138	16
60-69	888	29	12	1	23	2	-	65	41	41	125	-	525	24
70-79	1,664	14	3	1	3	2	-	10	15	33	82	-	1,480	21
80+	3,243	2	-	-	1	-	-	-	3	13	43	-	3,153	28

Previous table Proportion of mode of detection among newly notified pulmonary TB patients aged 20-59 years by occupation, 2012

Pulmonary TB patients	Individual medical checkup	Mass screening			Contact examination		Clinics/Hospitals				Others/Unknown	
		Residents	Employees	Schools/Facilities	Family	Others	Outpatients with TB symptoms	Inpatients with other diseases	Outpatients with other diseases			
Total		5,085	3.2	1.7	23.8	2.8	2.9	4.5	50.6	3.1	4.5	2.9
Service workers		351	1.1	1.4	22.5	0.0	1.7	4.3	59.8	4.0	3.4	1.7
Medical workers(*1)		459	3.1	0.4	39.0	0.4	1.7	15.5	33.1	0.7	3.5	2.6
Teachers/ Nursery nurses		51	5.9	0.0	31.4	0.0	3.9	5.9	52.9	0.0	0.0	0.0
Students		240	4.2	0.0	0.8	44.2	0.8	2.9	35.0	0.4	0.8	10.8
Other regular workers		1,994	2.4	1.0	39.7	0.3	2.8	3.1	44.0	1.6	3.9	1.4
Other temporary/ daily workers		379	2.6	4.2	17.7	0.0	4.5	2.9	59.9	0.8	3.7	3.7
Other self-employed		290	5.2	6.2	7.9	0.0	3.8	1.7	65.5	2.1	5.2	2.4
Housekeepers		193	6.2	4.7	3.1	0.0	4.7	1.0	68.4	2.6	5.7	3.6
Jobless/ Others		940	4.7	1.6	2.3	2.8	3.6	4.4	58.7	9.9	8.1	3.9
Unknown		188	2.1	1.6	12.2	2.1	1.6	5.3	65.4	1.1	2.1	6.4

*1 Medical workers include nurses, public health nurses, medical doctors and dentists, physical therapists, occupational therapists, medical technologists, radiographers, and co-medicals.

*2 TB symptoms: Respiratory symptoms such as cough, sputum expectoration, bloody sputum, and hemoptysis; and other symptoms such as wheezing, chest pain, back pain, dyspnea, fever, night sweating, fatigue tendency, and weight loss.

【Tuberculosis Characteristics upon Diagnosis(1)】

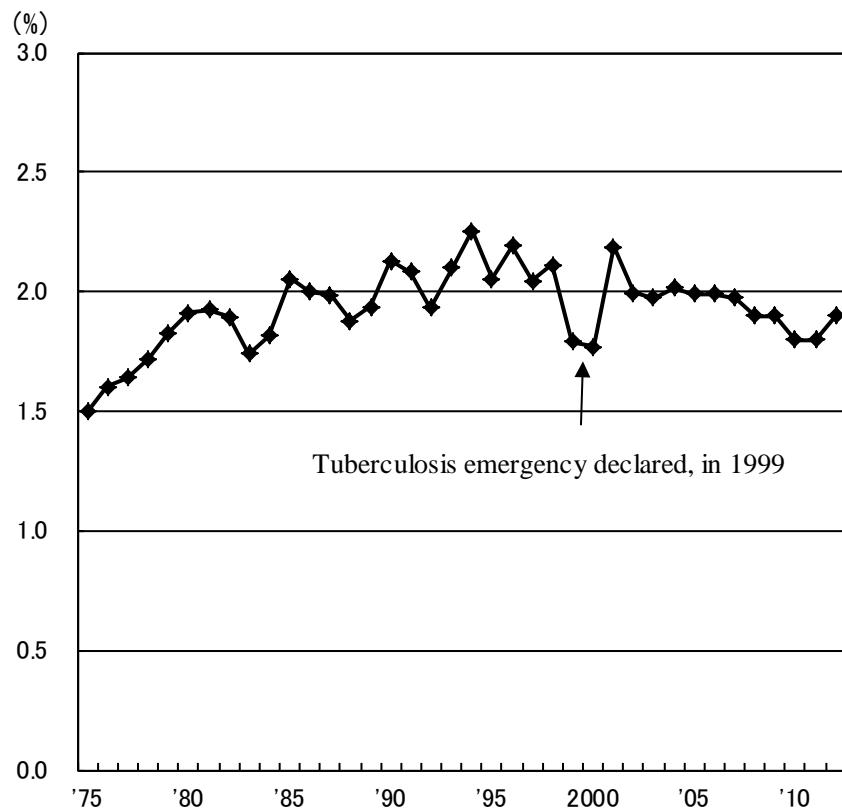
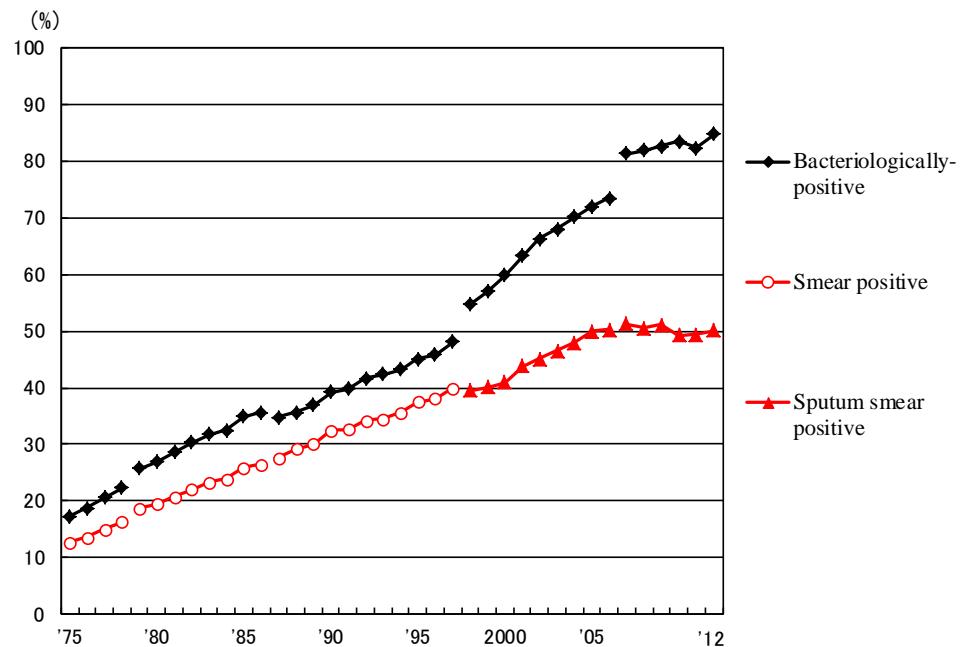


Fig.3 Proportion of far-advanced cavitary cases among newly notified pulmonary Tuberculosis patients, 1975-2012

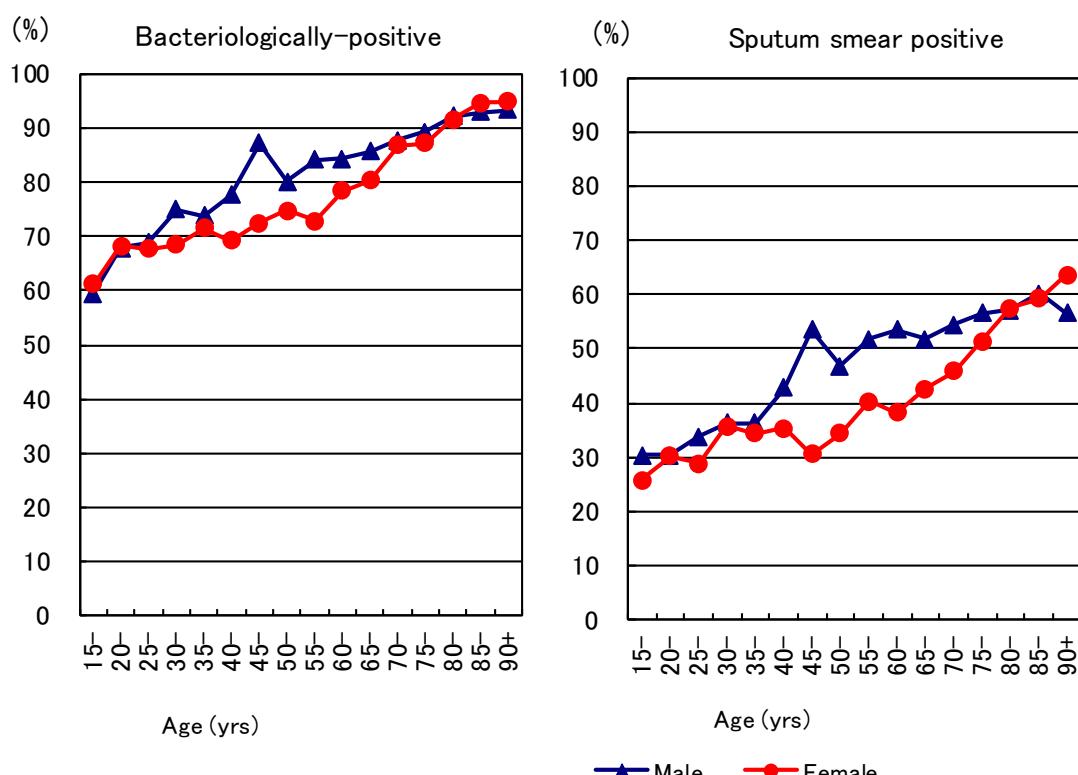


Previous Fig.

Proportion of bacteriologically confirmed cases among newly notified pulmonary tuberculosis patients, 1975-2012

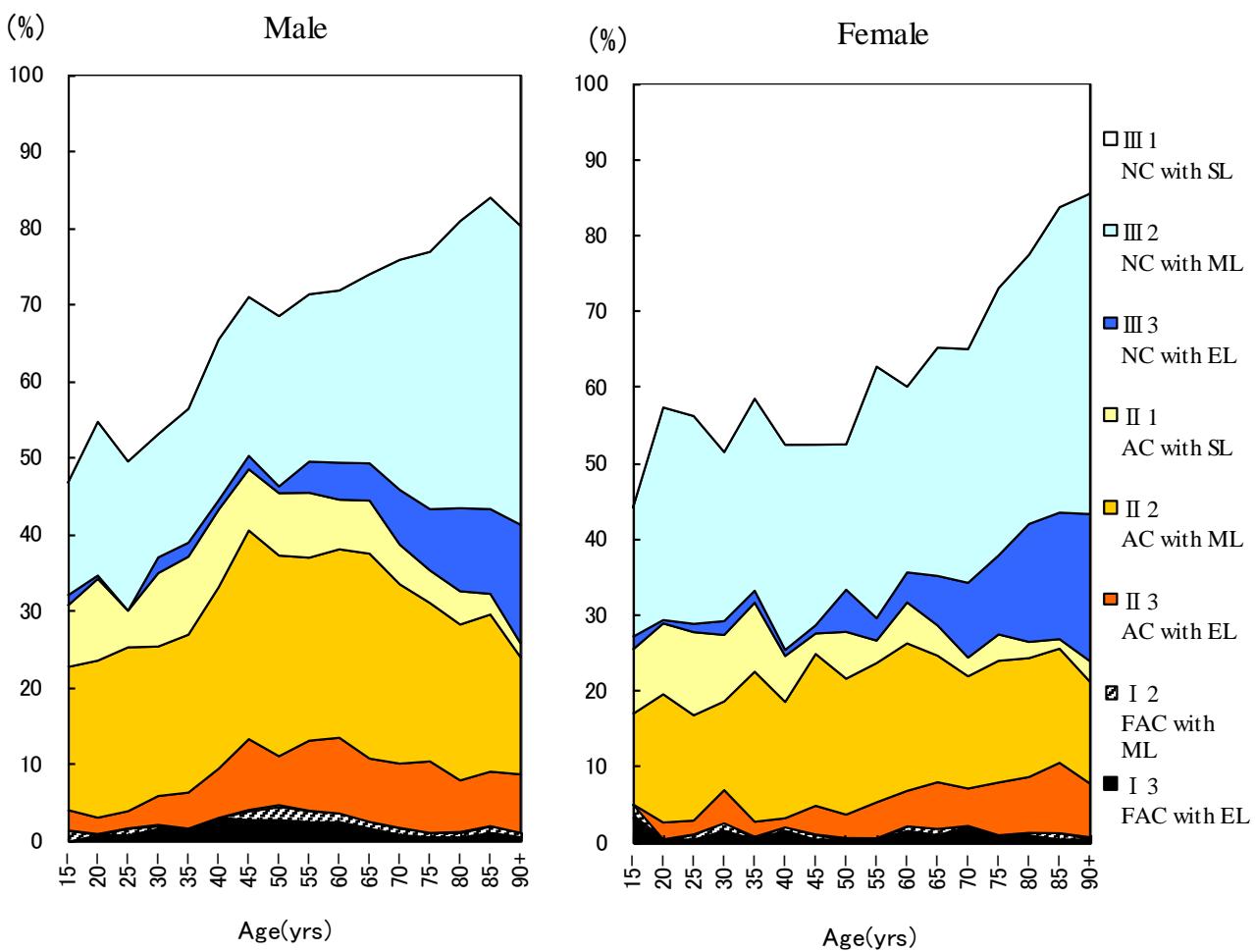
Sources of information and subjects:

- Annual tuberculosis reports from public health centers
- 1975-1978: All forms of tuberculosis
- 1979-1986: Pulmonary tuberculosis
- Nationwide computerized tuberculosis surveillance system
- 1987-1997: Pulmonary Tuberculosis
- 1998-2006: Pulmonary tuberculosis (New patient criteria for notification were applied)
- 2007-2009: Pulmonary tuberculosis (Item of nucleic acid amplification was added)



Previous Fig.

Proportion of bacteriologically confirmed cases among newly notified pulmonary tuberculosis patients by sex and 5-year age group, 2012



Previous Fig. Proportion of cases classified by X-ray Gakkai classification by sex and 5-yearage group, 2012

NC : Non-cavitory SL : Slight lesion AC : Advanced cavity ML : Moderate lesion

FAC: Far-advance cavity EL : Extensive lesion

Previous table Proportion of cavitary or/and sputum smear positive cases among newly notified pulmonary TB patients aged 30-59 years, 2012

Pulmonary TB	Male						Female							
	Cavitary or sputum smear(+)			Cavitary and sputum smear(+)			Cavitary or sputum smear(+)			Cavitary and sputum smear(+)				
	n	%	Ratio	n	%	Ratio	n	%	Ratio	n	%	Ratio		
Service workers	167	101	60.5	1.8	53	31.7	4.6	79	36	45.6	1.3	15	19.0	2.6
Medical workers	72	24	33.3	1.0	5	6.9	1.0	289	104	36.0	1.0	21	7.3	1.0
Teachers/ Nursery nurses	21	9	42.9	1.3	6	28.6	4.1	20	12	60.0	1.7	2	10.0	1.4
Other regular workers	1,269	666	52.5	1.6	337	26.6	3.8	326	131	40.2	1.1	42	12.9	1.8
Other temporary/ daily workers	195	128	65.6	2.0	91	46.7	6.7	117	59	50.4	1.4	27	23.1	3.2
Other self-employed	234	157	67.1	2.0	85	36.3	5.2	41	25	61.0	1.7	9	22.0	3.0
Jobless	592	367	62.0	1.9	204	34.5	5.0	261	137	52.5	1.5	55	21.1	2.9
Others	99	52	52.5	1.6	23	23.2	3.3	216	110	50.9	1.4	54	25.0	3.4
Total	2,649	1,504	56.8		804	30.4		1,349	614	45.5		225	16.7	

Others:Houskeepers/ Students/ Unknown

Ratio: The ratio of each proportion to that of medical workers

【Tuberculosis Characteristics upon Diagnosis(2)】

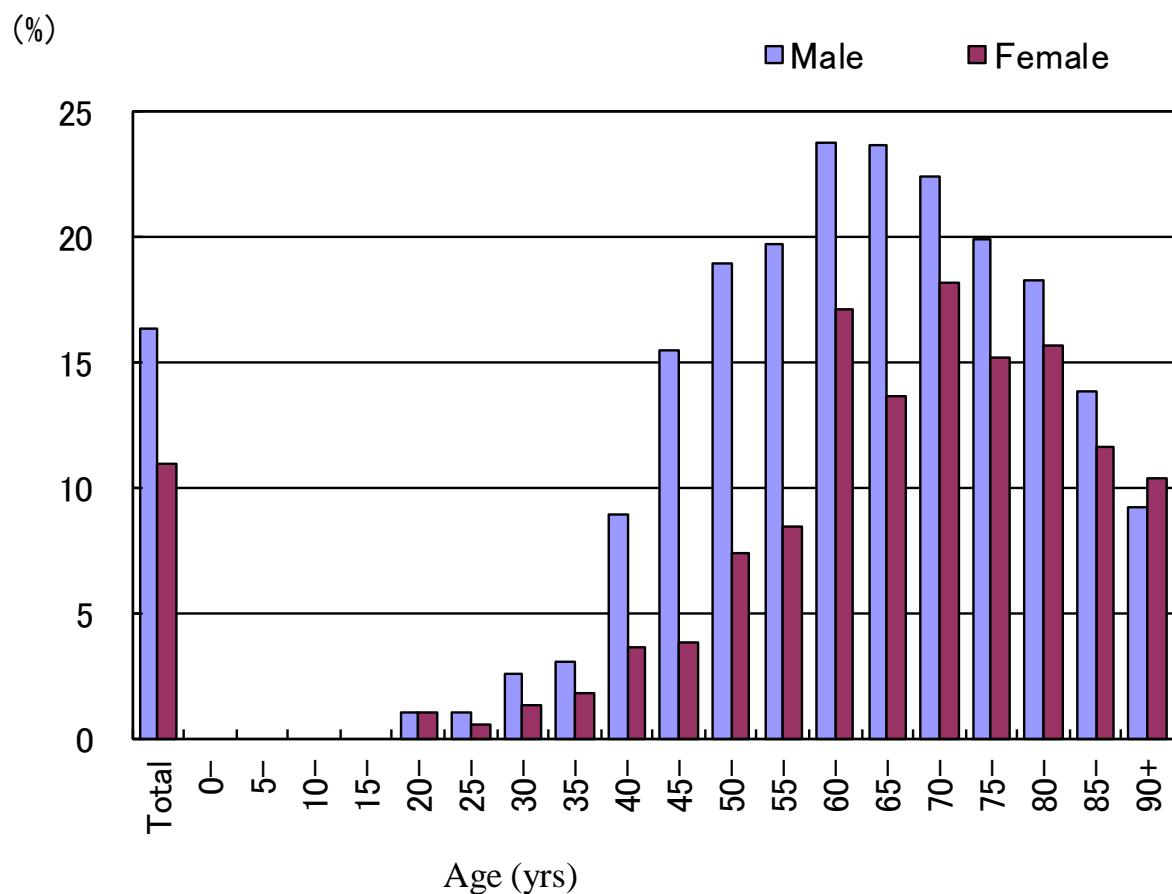


Fig.4 Proportion of newly notified tuberculosis patients with diabetes mellitus in each age-group by sex, 2012

Table 2 Number of newly notified tuberculosis patients with HIV infection, by sex and age group, 2012 and 2007–2012

Age group	Sputum smear positive		Other bacteriologic ally- positive		Bacteriologically-negative		Extra-pulmonary		Total	
	M	F	M	F	M	F	M	F	M	F
2012 Calendar year										
Total	22 (1)	4 (1)	6 (1)	1 (1)	4 (2)	1 (1)	19	5 (2)	51 (4)	11 (5)
0-19	0	0	0	0	0	0	1	0	1	0
20-24	1 (1)	0	1	0	0	0	0	0	2 (1)	0
25-29	1	0	0	0	1 (1)	0	1	0	3 (1)	0
30-34	1	0	0	1 (1)	0	0	2	1	3	2 (1)
35-39	0	0	0	0	1	0 1	3	0	4	0
40-44	4	0	1 (1)	0	0	1	4	1 (1)	9 (1)	2 (2)
45-49	1	1 (1)	0	0	1 1	0	4	0	6 (1)	1 (1)
50-54	2	0	0	0	0	0	1	0	3	0
55-59	1	0	1	0	0	0	1	1 1	3	1 (1)
60-64	4	0	1	0	0	0	1	0	6	0
65-69	4	0	1	0	1	0	1	1	7	1
70-74	1	1	0	0	0	0	0	0	1	1
75-79	0	0	0	0	0	0	0	1	0	1
80+	2	2	1	0	0	0	0	0	3	2
2007-2012 Calendar year										
Total	108 (10)	20 (13)	55 (10)	8 (5)	31 (4)	5 (3)	120 (21)	19 (10)	314 (45)	52 (31)
0-19	1 (1)	0	0	0	0	0	2	0	3 (1)	0
20-24	3 (2)	0	1	0	1 (1)	1 (1)	1	1	6 (3)	2 (1)
25-29	6 (3)	3 (2)	1 (1)	1 (1)	1 (1)	0	8 (1)	0	16 (6)	4 (3)
30-34	9 (3)	4 (4)	5	3 (2)	1	1 (1)	13 (4)	4 (2)	28 (7)	12 (9)
35-39	16	3 (3)	14 (4)	1 (1)	5	0 (1)	20 (3)	2 (2)	55 (7)	6 (6)
40-44	21	3 (3)	10 (4)	0	6 (1)	3	28 (10)	5 (4)	65 (15)	11 (8)
45-49	11 (1)	1 (1)	4	1 (1)	3 (1)	0	23 (3)	0	41 (5)	2 (2)
50-54	9	0	8 (1)	0	3	0	6	0	26 (1)	0
55-59	5	0	2	0	4	0	7	2 (2)	18	2 (2)
60-64	9	1	5	0	3	0	4	0	21	1
65-69	9	0	2	0	2	0	3	1	16	1
70-74	2	2	1	0	1	0	1	1	5	3
75-79	2	0	0	0	1	0	3	2	6	2
80+	5	3	2	2	0	0	1	1	8	6

() : Re-count of foreigners

HIV : Human Immunodeficiency Virus. M : male patients, F : female patients.

Previous table Drug susceptibility test results among newly notified pulmonary tuberculosis patients, by sex and age group, 2007-2012 (Re-count of foreigners)

Age group	Total										New treatment (Re-count)									
	Male					Female					Male					Female				
	DST result obtained	MDR	Any INH resist ance	Any RFP resist ance	* Any resist ance	DST result obtained	MDR	Any INH resist ance	Any RFP resist ance	* Any resist ance	DST result obtained	MDR	Any INH resist ance	Any RFP resist ance	* Any resist ance	DST result obtained	MDR	Any INH resist ance	Any RFP resist ance	* Any resist ance
2007-2012 Calendar year																				
Total	648	25	61	29	115	767	40	102	50	170	608	17	46	21	101	714	28	85	35	145
0-19	25	4	7	4	11	21	1	2	1	2	24	3	6	3	10	20	1	1	1	1
20-29	288	16	31	20	55	337	26	57	32	93	276	11	22	15	49	320	19	48	24	82
30-39	126	4	10	4	18	200	8	26	10	40	121	3	9	3	16	184	5	23	6	35
40-49	71	1	5	1	13	118	2	10	4	22	64	0	3	0	10	108	1	9	2	19
50-59	49	0	2	0	5	39	0	3	0	4	46	0	2	0	5	35	0	1	0	1
60-69	35	0	2	0	8	21	1	2	1	3	29	0	1	0	7	21	1	2	1	3
70-79	28	0	2	0	3	15	2	2	2	3	26	0	2	0	3	11	1	1	1	1
80+	26	0	2	0	2	16	0	0	0	3	22	0	1	0	1	15	0	0	0	3
2007-2012 Calendar year																				
Total	100%	3.9	9.4	4.5	17.7	100%	5.2	13.3	6.5	22.2	100%	2.8	7.6	3.5	16.6	100%	3.9	11.9	4.9	20.3
0-19	100	16.0	28.0	16.0	44.0	100	4.8	9.5	4.8	9.5	100	12.5	25.0	12.5	41.7	100	5.0	5.0	5.0	5.0
20-29	100	5.6	10.8	6.9	19.1	100	7.7	16.9	9.5	27.6	100	4.0	8.0	5.4	17.8	100	5.9	15.0	7.5	25.6
30-39	100	3.2	7.9	3.2	14.3	100	4.0	13.0	5.0	20.0	100	2.5	7.4	2.5	13.2	100	2.7	12.5	3.3	19.0
40-49	100	1.4	7.0	1.4	18.3	100	1.7	8.5	3.4	18.6	100	0.0	4.7	0.0	15.6	100	0.9	8.3	1.9	17.6
50-59	100	0.0	4.1	0.0	10.2	100	0.0	7.7	0.0	10.3	100	0.0	4.3	0.0	10.9	100	0.0	2.9	0.0	2.9
60-69	100	0.0	5.7	0.0	22.9	100	4.8	9.5	4.8	14.3	100	0.0	3.4	0.0	24.1	100	4.8	9.5	4.8	14.3
70-79	100	0.0	7.1	0.0	10.7	100	13.3	13.3	13.3	20.0	100	0.0	7.7	0.0	11.5	100	9.1	9.1	9.1	9.1
80+	100	0.0	7.7	0.0	7.7	100	0.0	0.0	0.0	18.8	100	0.0	4.5	0.0	4.5	100	0.0	0.0	0.0	20.0

DST: Drug susceptibility test. MDR: Multi-drug resistance, i.e., resistant to at least INH and RFP.

INH: Isoniazid. RFP: Rifampicin.