

**DIVISION OF COMMUNICABLE DISEASE PREVENTION  
& PUBLIC HEALTH PREPAREDNESS  
KANSAS CITY, MISSOURI HEALTH DEPARTMENT  
2006**

**TUBERCULOSIS SURVEILLANCE  
ANNUAL REPORT**

**SUBMITTED BY:**  
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**REPORTED TUBERCULOSIS CASES  
AND CASE RATES PER 100,000  
KANSAS CITY RESIDENTS  
1997 - 2006**

<b>YEAR</b>	<b>POPULATION</b>	<b>TB CASES</b>	<b>CASE RATE</b>
*1997	439,626	39	8.9
1998	440,266	39	8.9
1999	440,906	42	9.5
2000	441,545	42	9.5
*2001	441,545	32	7.2
*2002	441,545	28	6.3
2003	441,545	26	5.9
2004	444,387	21	4.7
2005	444,387	24	5.4
2006	444,387	24	5.4

\*Includes *Mycobacterium bovis* cases (1 in 1997, 2 in 2001 and 1 in 2002)

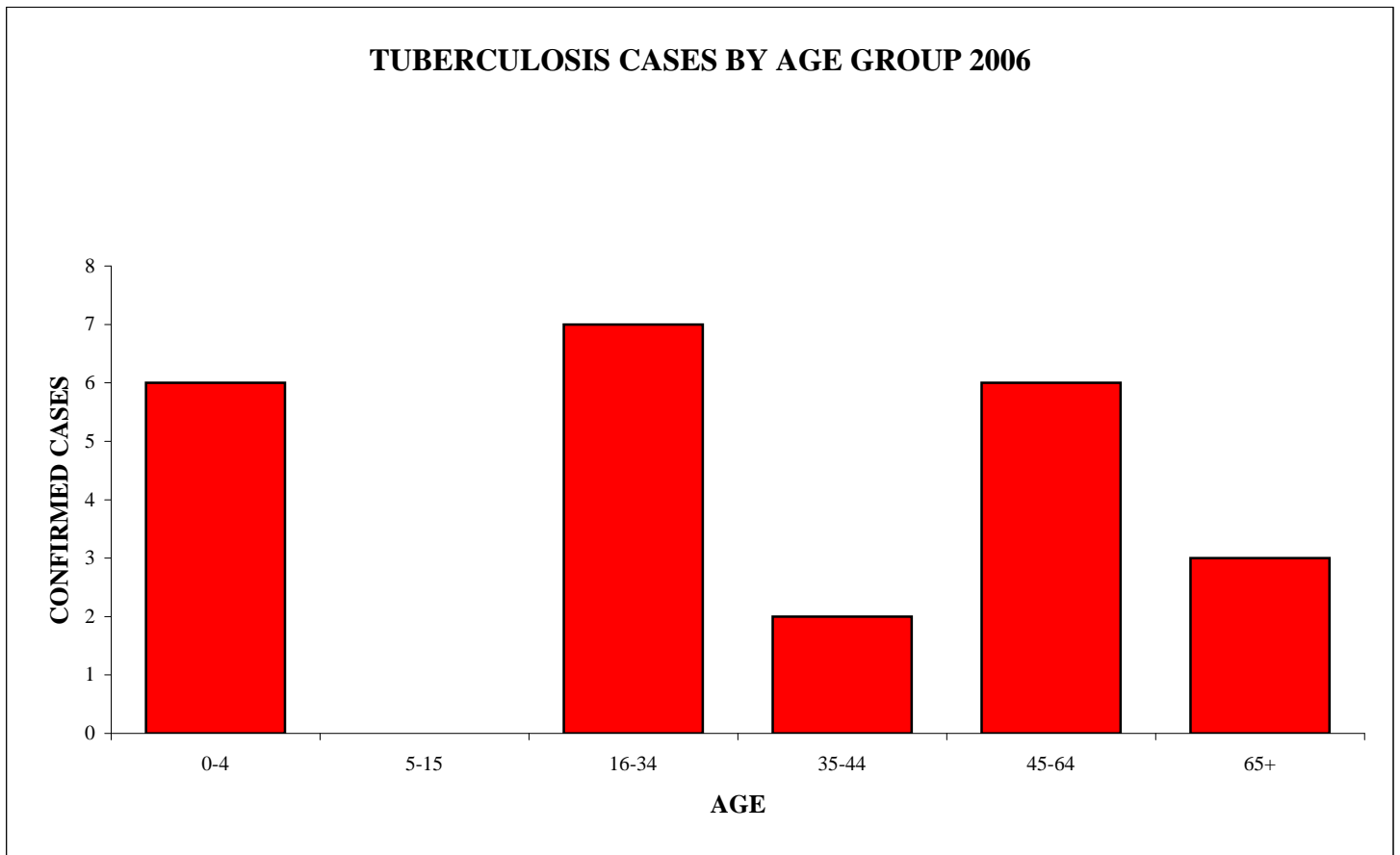
**CASES OF TUBERCULOSIS  
KANSAS CITY RESIDENTS  
2001-2006**

	2006	2005	2004	2003	2002	2001
<b>ALL CASES</b>	<b>24</b>	<b>24</b>	<b>21</b>	<b>26</b>	<b>28</b>	<b>32</b>
PULMONARY CASES	22	16	16	21	23	22
EXTRA-PULMONARY CASES	3	8	5	6	9	12
LYMPHATIC	2	6	2	3	*3	4
PANCREATIC	0	0	0	0	0	0
PERITONEAL	1	0	0	0	0	1
PLEURAL	0	0	1	*1	0	*5
GENITO-URINARY	0	0	0	0	1	2
MEDIASTINAL	0	0	0	0	0	0
OTHER	0	2	2	2	*5	0
MYCOBACTERIUM <i>BOVIS</i> CASES	0	0	0	0	1	2
A.F.B. SMEAR	8	10	11	14	9	14
CULTURE POSITIVE	15	21	19	22	19	25
CAVITARY DISEASE PRESENT	4	7	6	8	3	6
MANTOUX TEST POSITIVE	15	8	10	14	15	13
ANERGIC	2	6	3	4	6	2
CASES REPORTED AT DEATH	0	2	2	0	1	0
PREVIOUS TB DIAGNOSIS	1	2	0	4	0	2
PREVIOUS TB INFECTION	2	4	7	5	4	3
DRUG RESISTANT CASES	1 INH	2 2 INH,RIF 2 RIF	5 INH	1 INH	3 2 INH 1PZA	4 2 INH 2 PZA

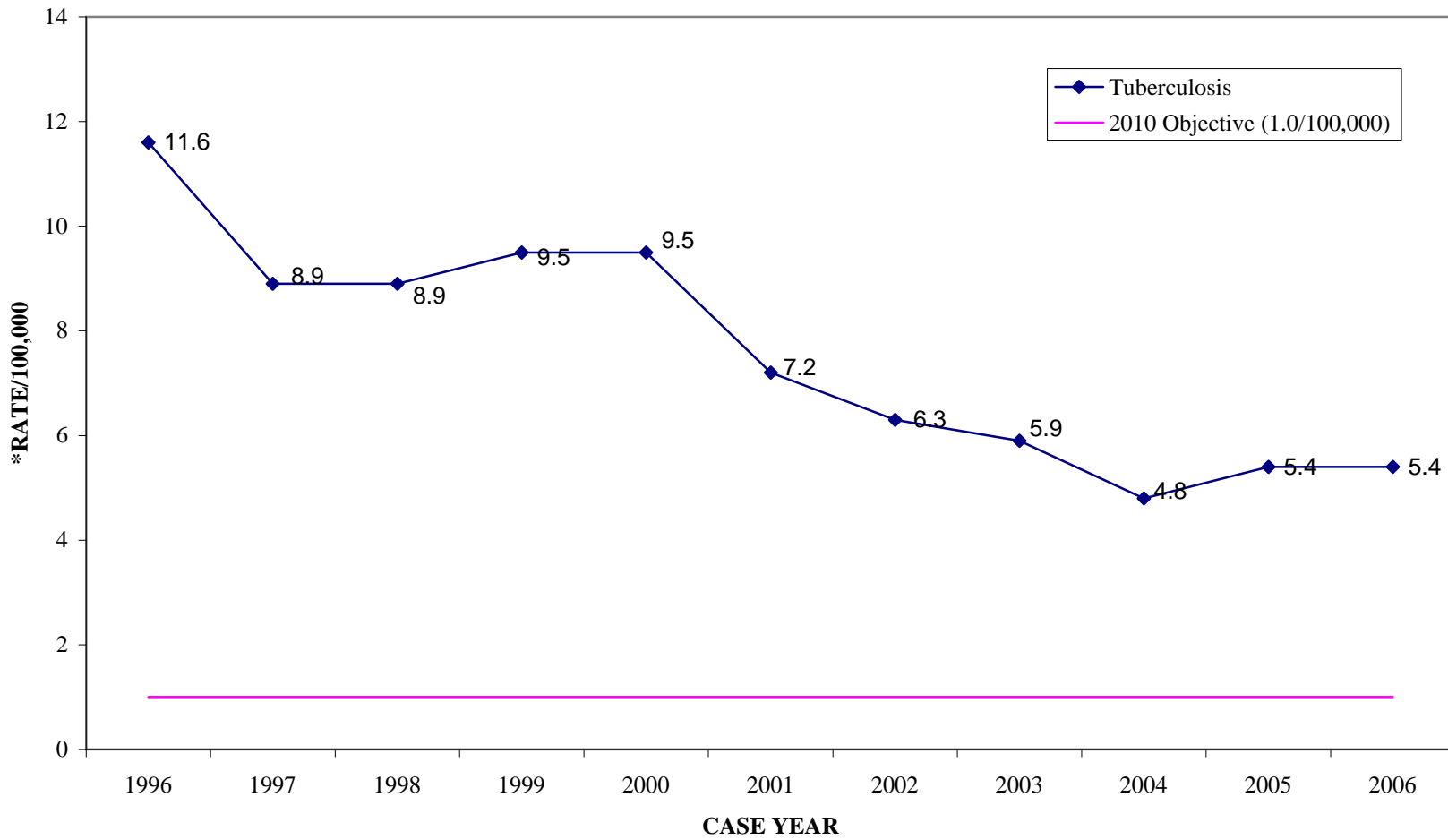
\*SOME CASES WERE BOTH PULMONARY & EXTRA-PULMONARY (1 in 2003, 4 in 2002, 2 in 2001)

**REPORTED CASES  
OF TUBERCULOSIS  
BY AGE, RACE AND SEX  
KANSAS CITY RESIDENTS  
2006**

AGE	MALE						FEMALE						
	ASIAN	HISP	BLACK	UNK	WHITE	AGE	ASIAN	HISP	BLACK	UNK	WHITE	AGE	TOTAL
						SUB						SUB	
0-4	0	0	0	0	0	0	0	5	1	0	0	6	6
5-15	0	0	0	0	0	0	0	0	0	0	0	0	0
16-34	0	2	4	0	0	6	0	0	1	0	0	1	7
35-44	0	0	1	0	0	1	0	0	0	0	1	1	2
45-64	0	2	2	0	1	5	0	0	0	0	1	1	6
65+	1	0	1	0	0	2	0	1	0	0	0	1	3
Grand Total	1	4	8	0	1	14	0	6	2	0	2	10	24



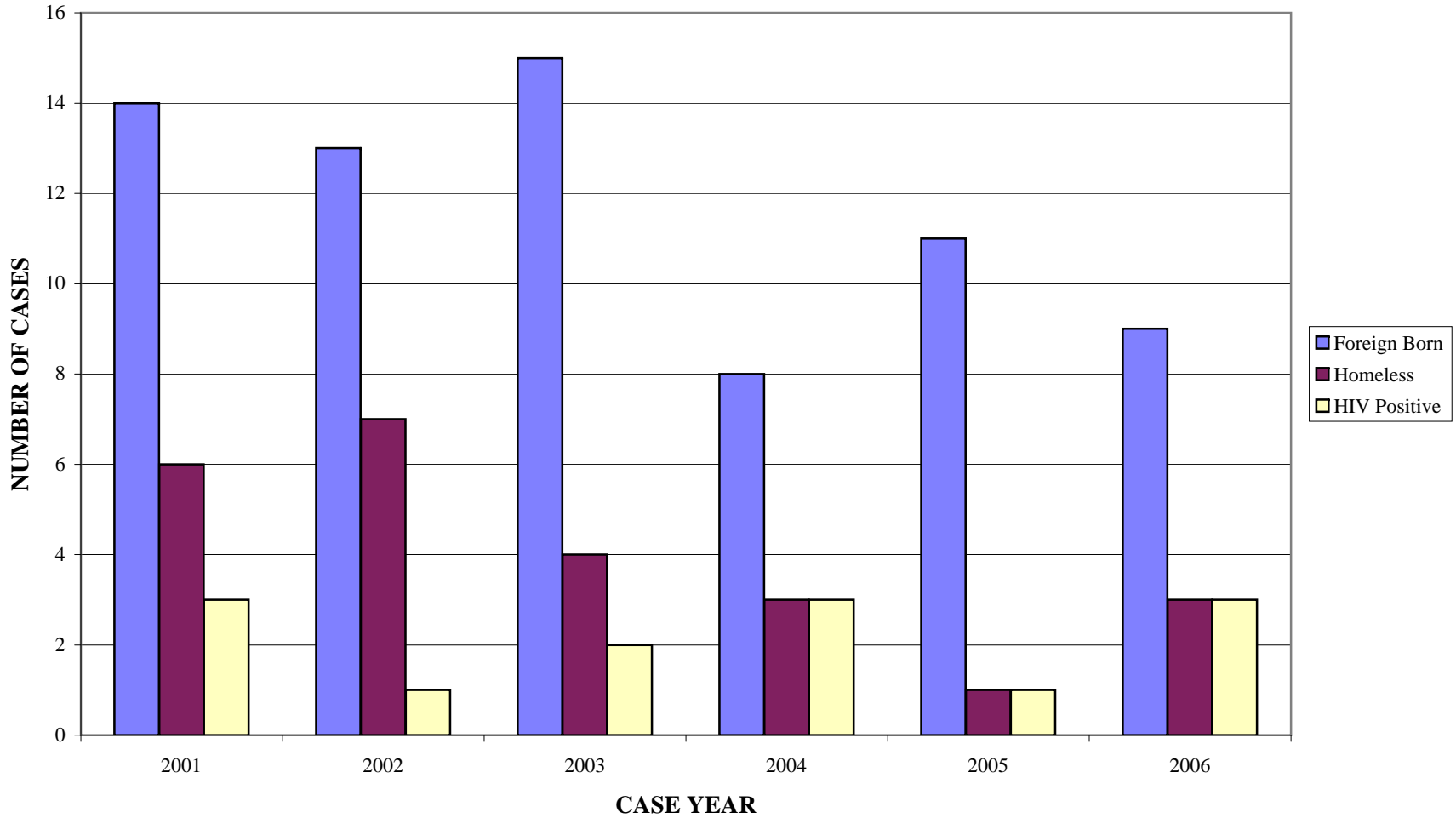
# TUBERCULOSIS CASE RATES KANSAS CITY RESIDENTS 1996-2006



\*BASED ON KANSAS CITY 2000 CENSUS POPULATION DATA

Communicable Disease Prevention  
2006 Annual Report

**TUBERCULOSIS CASES BY RISK FACTOR  
KANSAS CITY RESIDENTS  
2001-2006**

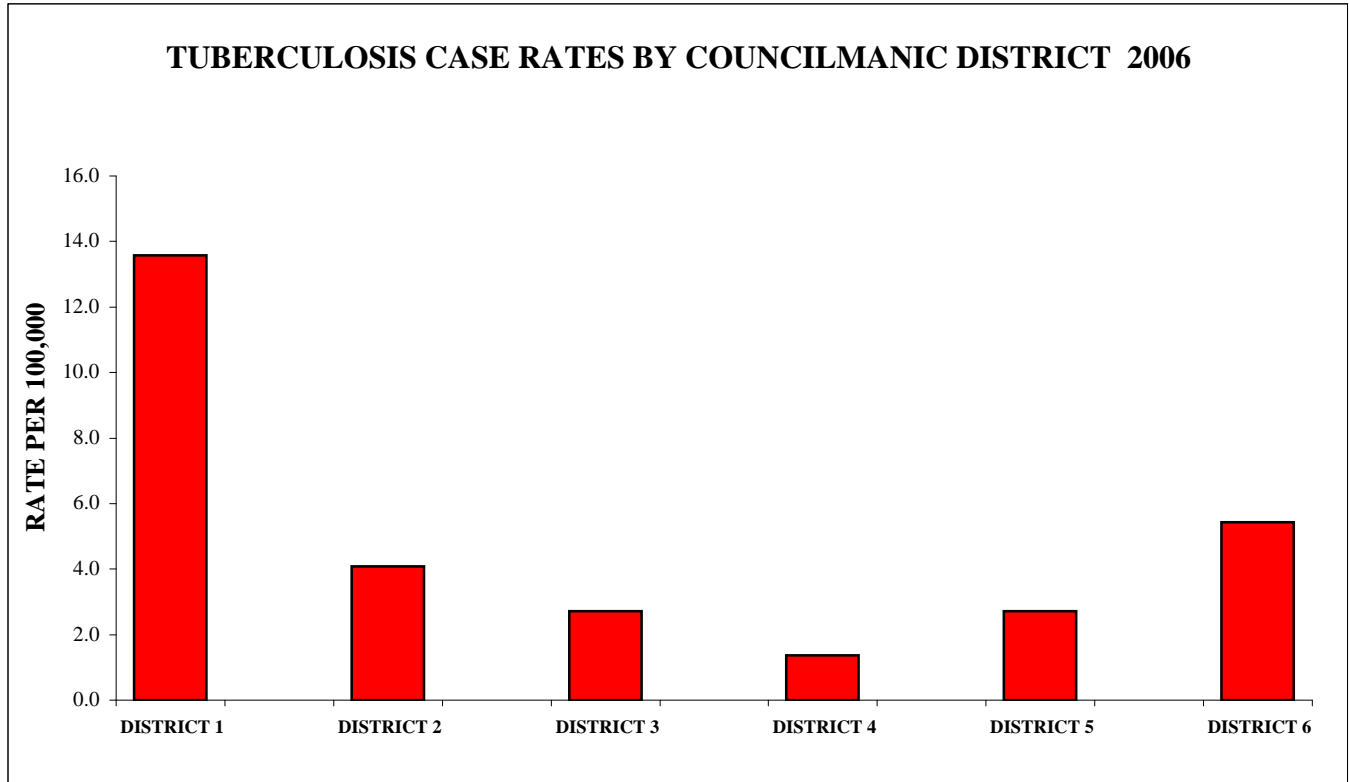


Other risk factors include: IV drug use (4.2%), recent history of incarceration (4.2%)

**REPORTED TUBERCULOSIS CASE RATES  
BY COUNCILMANIC DISTRICT  
RATE PER 100,000\*  
KANSAS CITY RESIDENTS  
2001-2006**

	2006	2005	2004	2003	2002	2001
DISTRICT 1	13.6	12.2	9.5	12.2	8.2	9.5
DISTRICT 2	4.1	4.1	2.7	6.8	4.1	6.8
DISTRICT 3	2.7	6.8	4.1	2.7	10.9	10.9
DISTRICT 4	1.4	1.4	5.4	4.1	0.0	2.7
DISTRICT 5	2.7	4.1	0.0	2.7	5.4	2.7
DISTRICT 6	5.4	1.4	4.1	1.4	1.4	5.4
UNKNOWN	[2]	[2]	[2]	[4]	[6]	[4]

\*POPULATION PER DISTRICT IS APPROXIMATELY 73,600



**TUBERCULOSIS CASES  
THERAPY OUTCOME  
2001-2006**

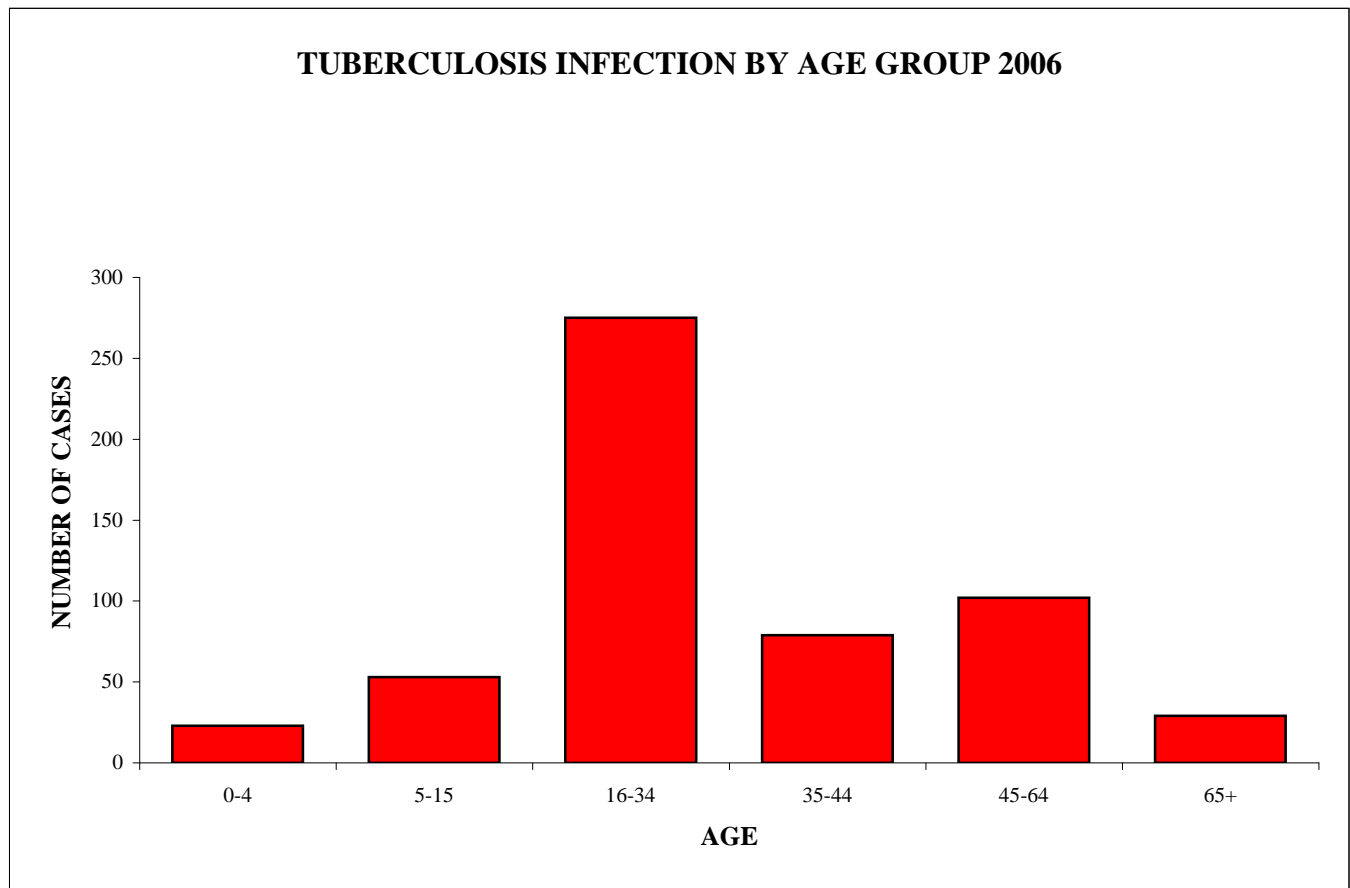
	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
<b>NEW CLIENTS ADDED DURING YEAR</b>	24	24	21	26	28	32
<b>CLIENTS CLOSED TO SUPERVISION</b>	13	24	21	26	28	32
CLIENT COMPLETED THERAPY	7	19	14	19	23	27
CLIENT MOVED TO NEW JURISDICTION	4	2	3	3	0	2
THERAPY SUSPENDED MEDICALLY	1	0	0	0	0	0
NO TREATMENT ORDERED BY PHYSICIAN	0	0	0	0	1	0
CLIENT DIED	0	3	4	1	4	2
LOST TO FOLLOWUP	1	0	0	3	0	1
<b>STILL ACTIVE AT YEAR END 2006</b>	11	0	0	0	0	0

**REPORTED TUBERCULOSIS INFECTION  
AND INFECTION RATES PER 100,000  
KANSAS CITY RESIDENTS  
1997 - 2006**

<b>YEAR</b>	<b>POPULATION</b>	<b>TB INFECTION</b>	<b>INFECTION RATE</b>
1997	439,626	713	162.2
1998	440,266	829	188.3
1999	440,906	774	175.5
2000	441,545	681	154.2
2001	441,545	803	181.9
2002	441,545	557	126.1
2003	441,545	509	115.3
2004	444,387	603	135.7
2005	444,387	694	156.2
2006	444,387	584	131.4

**REPORTED CASES  
OF TUBERCULOSIS INFECTION  
BY AGE, RACE AND SEX  
KANSAS CITY RESIDENTS  
2006**

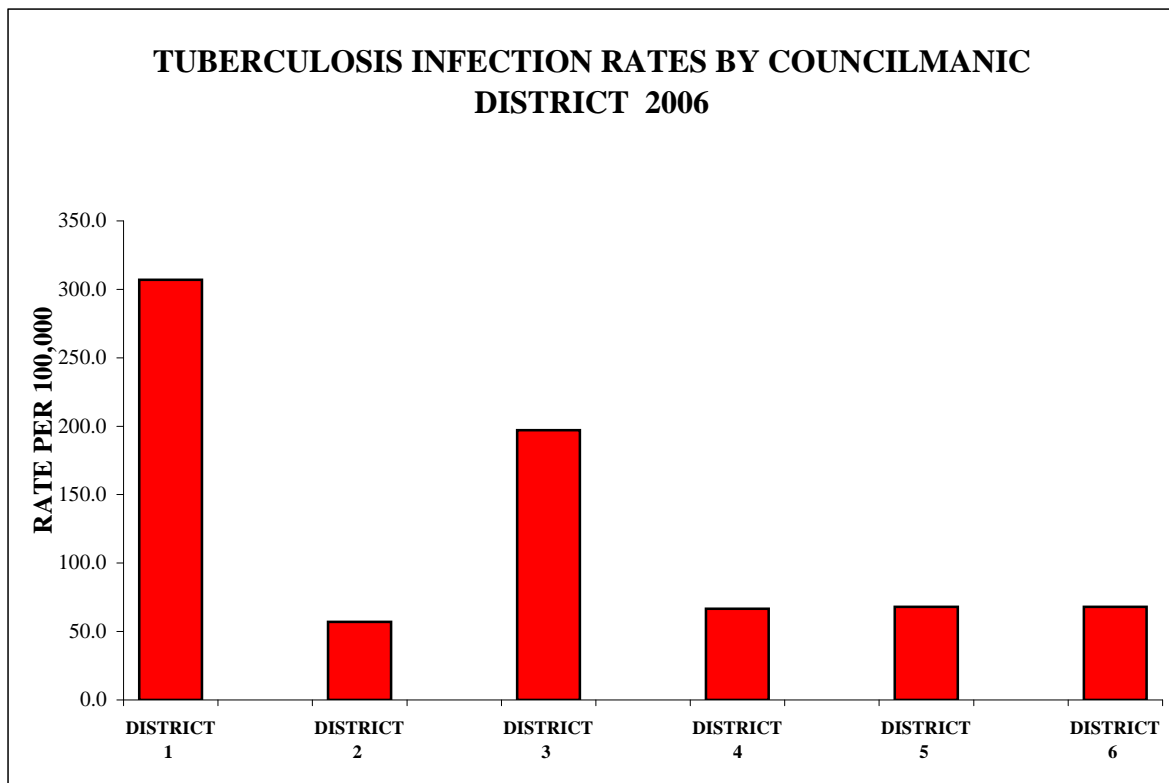
AGE	MALE						FEMALE						AGE SUB TOTAL	AGE TOTAL
	ASIAN	HISP	BLACK	UNK	WHITE	TOTAL	ASIAN	HISP	BLACK	UNK	WHITE	TOTAL		
	0-4	2	4	9	0	0	15	1	5	1	0	1		
5-15	1	7	13	0	1	22	4	16	10	0	1	31	53	
16-34	11	20	35	8	10	84	16	108	48	13	6	191	275	
35-44	4	7	17	4	7	39	4	12	16	7	1	40	79	
45-64	6	10	29	3	11	59	9	2	21	6	5	43	102	
65+	2	0	12	1	2	17	2	0	9	0	1	12	29	
Unknown	0	2	0	2	0	4	2	13	0	3	1	19	23	
Grand Total	26	50	115	18	31	240	38	156	105	29	16	344	584	



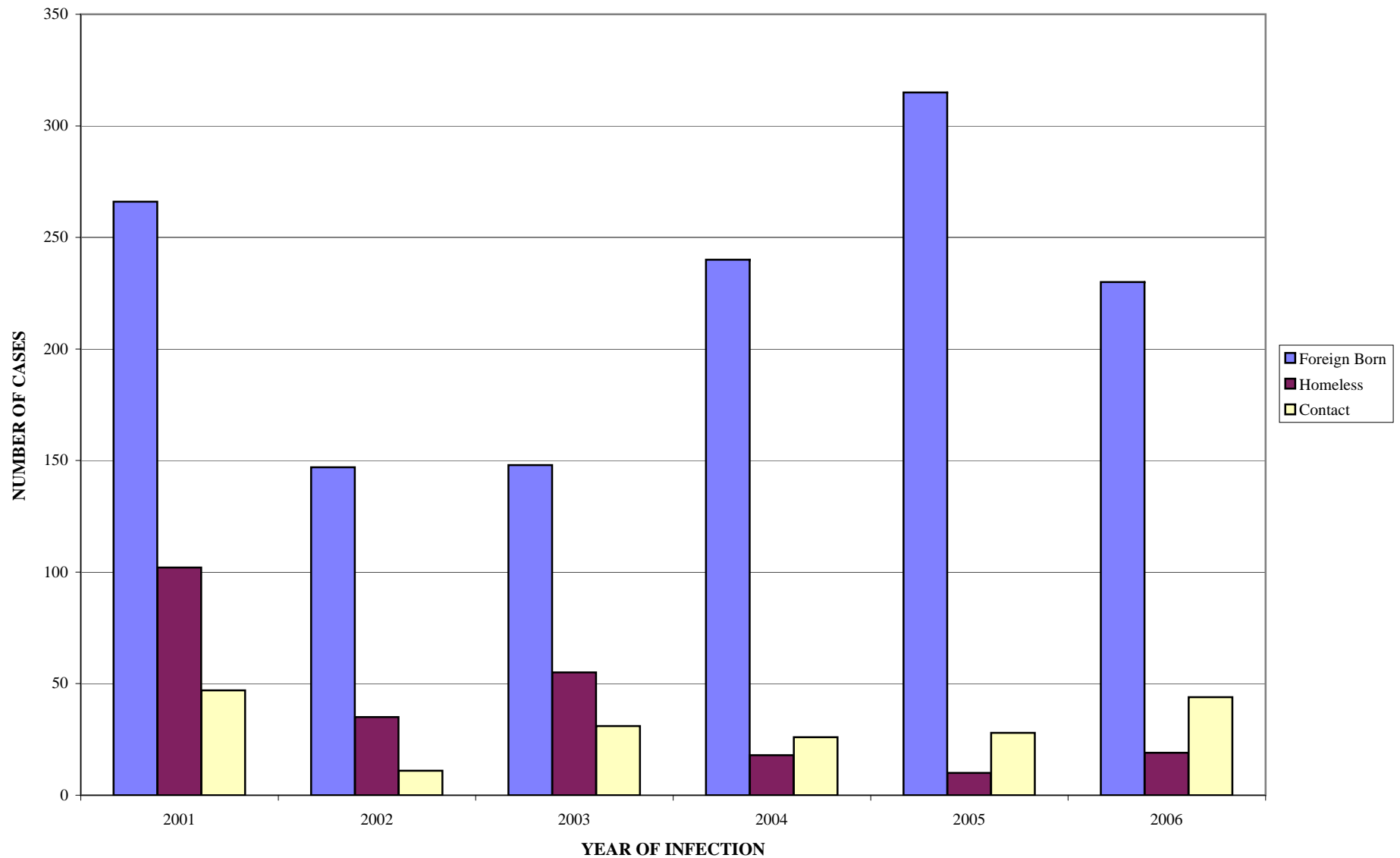
**REPORTED TUBERCULOSIS INFECTION  
BY COUNCILMANIC DISTRICT  
RATE PER 100,000\*  
KANSAS CITY RESIDENTS  
2001-2006**

	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
DISTRICT 1	307.1	346.5	191.6	195.7	195.7	284.0
DISTRICT 2	57.1	47.6	39.4	62.5	100.5	119.6
DISTRICT 3	197.0	199.7	214.7	127.7	144.0	222.8
DISTRICT 4	66.6	96.5	73.4	70.7	81.5	112.8
DISTRICT 5	67.9	89.7	53.0	78.8	97.8	127.7
DISTRICT 6	67.9	78.8	47.6	47.6	72.0	78.8
UNKNOWN	[22]	[18]	[52]	[55]	[44]	[103]

\*POPULATION PER DISTRICT IS APPROXIMATELY 73,600



**TUBERCULOSIS INFECTIONS BY RISK FACTOR  
KANSAS CITY, MISSOURI  
2001-2006**

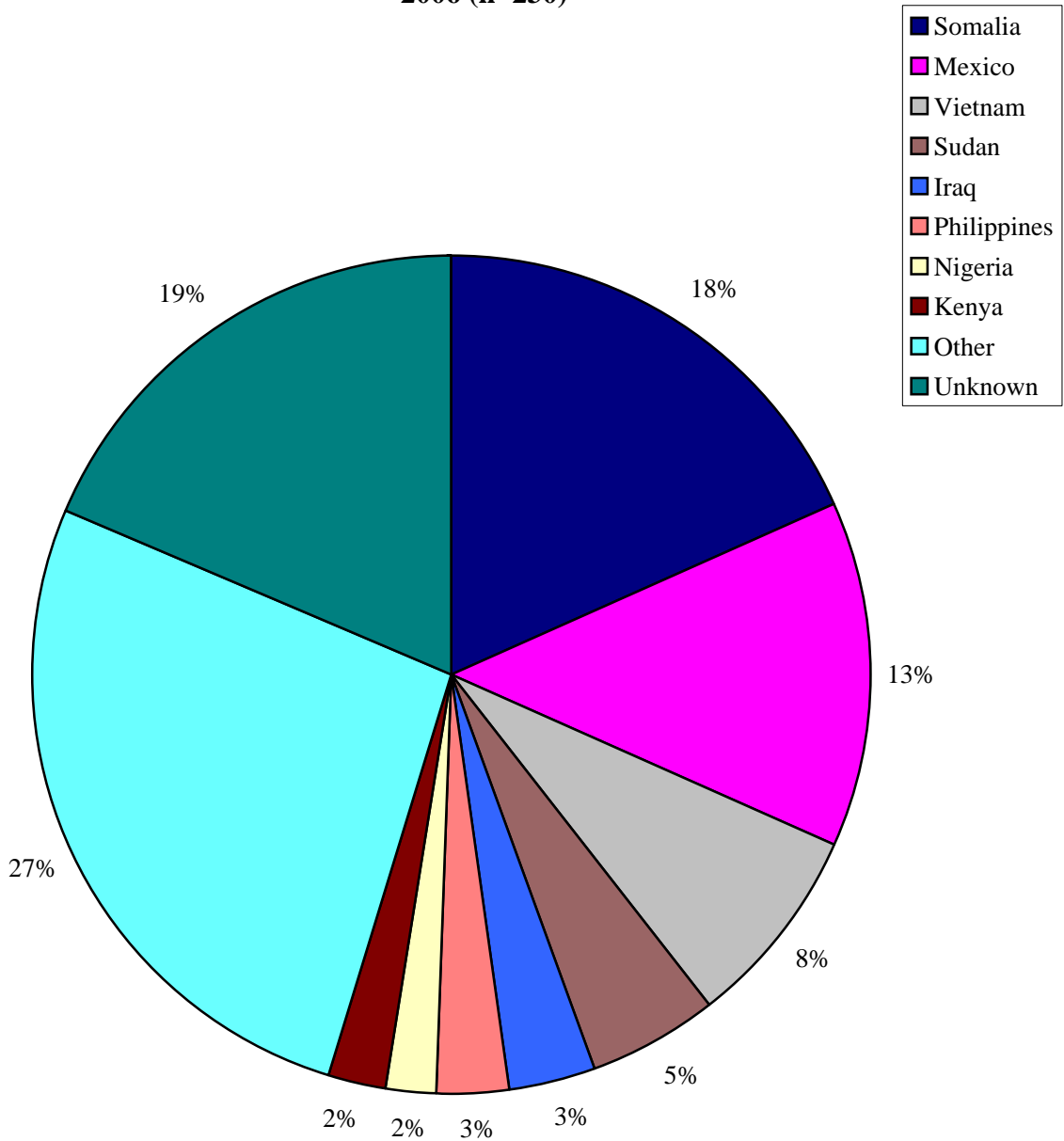


Other risk factors include: employee in a high-risk setting (11% of total infections), IV drug use (<1%), recent history of incarceration (2.6%), alcohol abuse (<1%), nursing home resident (1.9%) and HIV infection (<1%)

**TUBERCULOSIS CONTROL  
PREVENTIVE THERAPY  
JAN 1, 2006 - DEC 31, 2006**

	<b>CONTACTS</b>	<b>CONVERTERS</b>	<b>OTHERS</b>	<b>TOTAL</b>
<b>CLIENTS EVALUATED</b>	<b>44</b>	<b>31</b>	<b>509</b>	<b>584</b>
>15 YEARS	31	29	448	508
=< 15 YEARS	13	2	61	76
<b>COMPLETED THERAPY</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>15</b>
<b>INCOMPLETE THERAPY</b>				
DECEASED	0	0	2	2
LOST TO FOLLOWUP	6	0	21	27
MEDS DC BY PHYSICIAN	0	0	1	1
MOVED	3	0	2	5
NO RESPONSE	0	1	7	8
NO TREATMENT ORDERED	1	0	5	6
NON COMPLIANT	1	2	19	22
PREVIOUSLY TREATED	1	0	0	1
REFUSED TREATMENT	0	1	7	8
OTHER	1	0	6	7
PENDING (STILL OPEN)	30	23	429	482

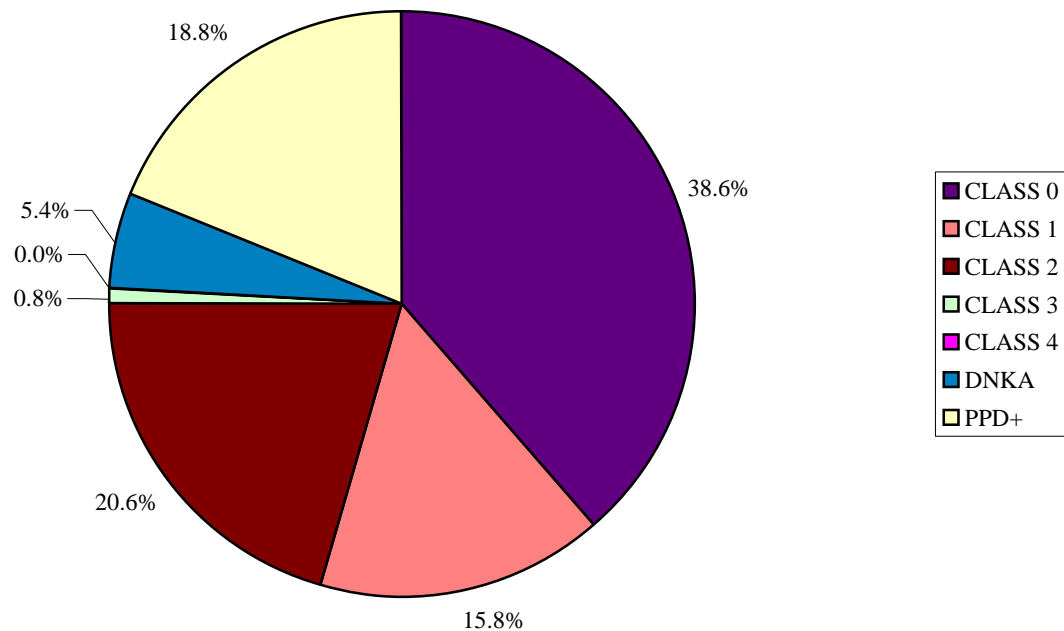
**TB INFECTION AMONG FOREIGN-BORN IMMIGRANTS  
KANSAS CITY, MISSOURI  
2006 (n=230)**



## TUBERCULOSIS CLINIC ACTIVITIES 2001 - 2006

	2006	2005	2004	2003	2002	2001
MANTOUX TESTS GIVEN	373	469	989	271	717	531
NUMBER POSITIVE	70	157	188	60	30	52
PERCENT POSITIVE	18.8	33.5	19.0	22.1	4.2	9.8
CHEST X-RAYS	155	207	234	156	238	298
MEDICATION DELIVERIES	1826	1805	1722	1726	1806	1869

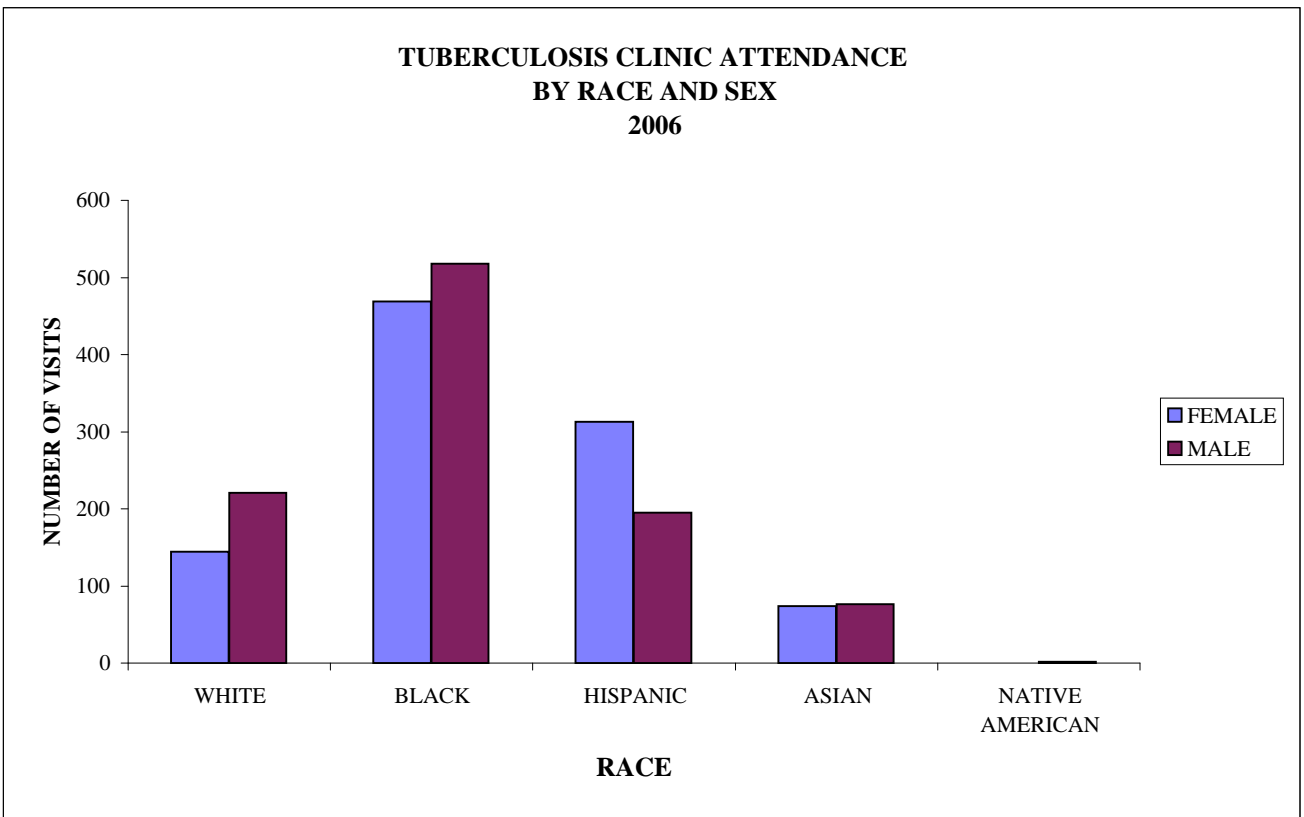
### RESULTS OF SKIN TESTS GIVEN BY THE TUBERCULOSIS CLINIC 2006



**Class 0:** No TB exposure, not infected **Class 1:** TB exposure, no evidence of infection  
**Class 2:** TB infection, no disease **Class 3:** TB, clinically active **Class 4:** TB, not clinically active  
**Class 5:** TB suspected **DNKA:** Tested, didn't return for reading **PPD+:** TB Infected, need further evaluation

**TUBERCULOSIS CLINIC ATTENDANCE  
1998 - 2006**

	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>TOTAL</b>
<b>1998</b>	137	177	144	159	147	171	209	234	199	202	153	115	<b>2047</b>
<b>1999</b>	87	141	247	207	133	174	208	227	239	239	180	188	<b>2270</b>
<b>2000</b>	171	189	256	160	186	232	193	153	212	163	174	147	<b>2236</b>
<b>2001</b>	182	175	214	210	146	181	159	137	132	142	171	115	<b>1964</b>
<b>2002</b>	116	215	195	197	229	234	299	230	167	189	153	139	<b>2363</b>
<b>2003</b>	116	114	95	130	113	116	111	111	117	169	168	153	<b>1513</b>
<b>2004</b>	239	204	191	198	216	291	233	150	209	211	291	222	<b>2655</b>
<b>2005</b>	169	160	176	181	168	149	149	188	169	169	211	220	<b>2109</b>
<b>2006</b>	205	161	170	157	186	188	112	140	164	116	235	178	<b>2012</b>



**CASES OF INFECTION  
BY MYCOBACTERIA OTHER  
THAN TUBERCULOSIS (MOTT)  
2001 - 2006**

	2001	2002	2003	2004	2005	2006
KNOWN HIV CO-INFECTION	2	3	3	3	0	3
M. AVIUM COMPLEX	16	25	13	14	17	16
M. KANSASII	6	1	1	0	3	2
M. FORTUITUM	2	8	5	4	5	8
M. GORDONAE	8	10	12	10	6	11
M. CHELONAE	1	2	3	3	3	5
M. TERRAE	0	1	1	0	1	0
OTHER/UNKNOWN	6	5	6	6	4	7
TOTAL	39	52	41	37	39	49

