

**DIVISION OF COMMUNICABLE DISEASE PREVENTION  
& PUBLIC HEALTH PREPAREDNESS  
KANSAS CITY, MISSOURI HEALTH DEPARTMENT  
2005**

**TUBERCULOSIS SURVEILLANCE  
ANNUAL REPORT**

**SUBMITTED BY:**  
RON GRIFFIN, M.P.H.  
DIVISION MANAGER

**REPORT PREPARED BY:**  
Tiffany Wilkinson, M.P.H.; Public Health Specialist III  
Ortella Williams, R.N.; Public Health Nurse Supervisor

**REPORTED TUBERCULOSIS CASES  
AND CASE RATES PER 100,000  
KANSAS CITY RESIDENTS  
1996 - 2005**

<b>YEAR</b>	<b>POPULATION</b>	<b>TB CASES</b>	<b>CASE RATE</b>
1996	438,986	51	11.6
*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

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

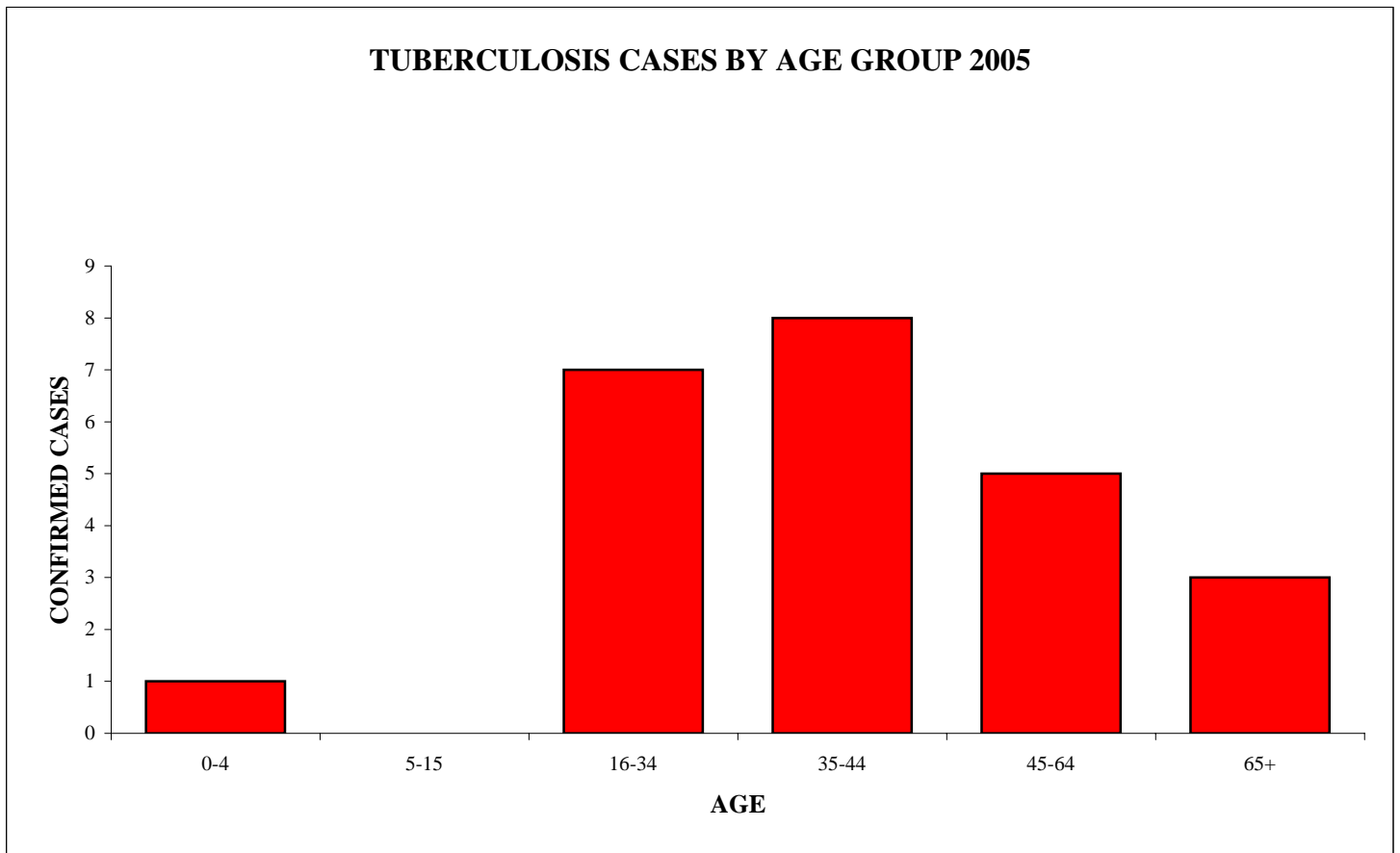
**CASES OF TUBERCULOSIS  
KANSAS CITY RESIDENTS  
2000-2005**

	2005	2004	2003	2002	2001	2000
<b>ALL CASES</b>	<b>24</b>	<b>21</b>	<b>26</b>	<b>28</b>	<b>32</b>	<b>42</b>
PULMONARY CASES	16	16	21	23	22	28
EXTRA-PULMONARY CASES	8	5	6	9	12	14
LYMPHATIC	6	2	3	*3	4	1
PANCREATIC	0	0	0	0	0	0
PERITONEAL	0	0	0	0	1	1
PLEURAL	0	1	*1	0	*5	3
GENITO-URINARY	0	0	0	1	2	2
MEDIASTINAL	0	0	0	0	0	0
OTHER	2	2	2	*5	0	7
MYCOBACTERIUM <i>BOVIS</i> CASES	0	0	0	1	2	0
A.F.B. SMEAR	10	11	14	9	14	14
CULTURE POSITIVE	21	19	22	19	25	31
CAVITARY DISEASE PRESENT	7	6	8	3	6	6
MANTOUX TEST POSITIVE	8	10	14	15	13	22
ANERGIC	6	3	4	6	2	3
CASES REPORTED AT DEATH	2	2	0	1	0	1
PREVIOUS TB DIAGNOSIS	2	0	4	0	2	2
PREVIOUS TB INFECTION	4	7	5	4	3	3
DRUG RESISTANT CASES	2	5	1	3	4	3
	1 INH,RIF 1 RIF	INH	INH	2 INH 1PZA	2 INH 2 PZA	INH

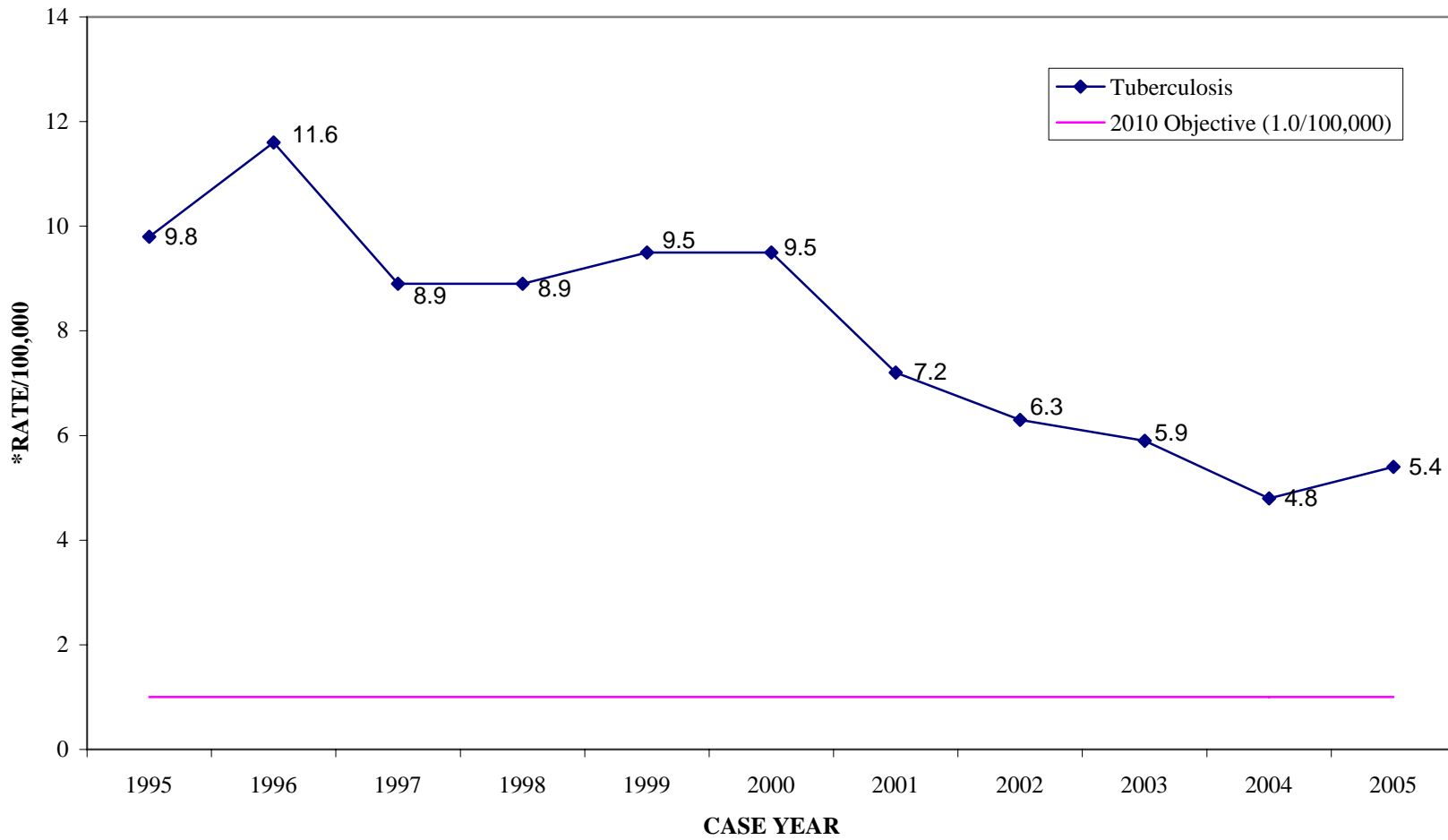
\*SOME CASES WERE BOTH PULMONARY & EXTRA-PULMONARY (1 in 2003, 4 in 2002, 2 in 2001)

**REPORTED CASES  
OF TUBERCULOSIS  
BY AGE, RACE AND SEX  
KANSAS CITY RESIDENTS  
2005**

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	0	1	0	0	1	1
5-15	0	0	0	0	0	0	0	0	0	0	0	0	0
16-34	0	1	2	0	0	3	0	1	3	0	0	4	7
35-44	0	0	5	0	1	6	0	1	1	0	0	2	8
45-64	0	0	3	0	1	4	0	0	0	0	1	1	5
65+	0	0	0	0	0	0	1	1	1	0	0	3	3
Grand Total	0	1	10	0	2	13	1	3	6	0	1	11	24



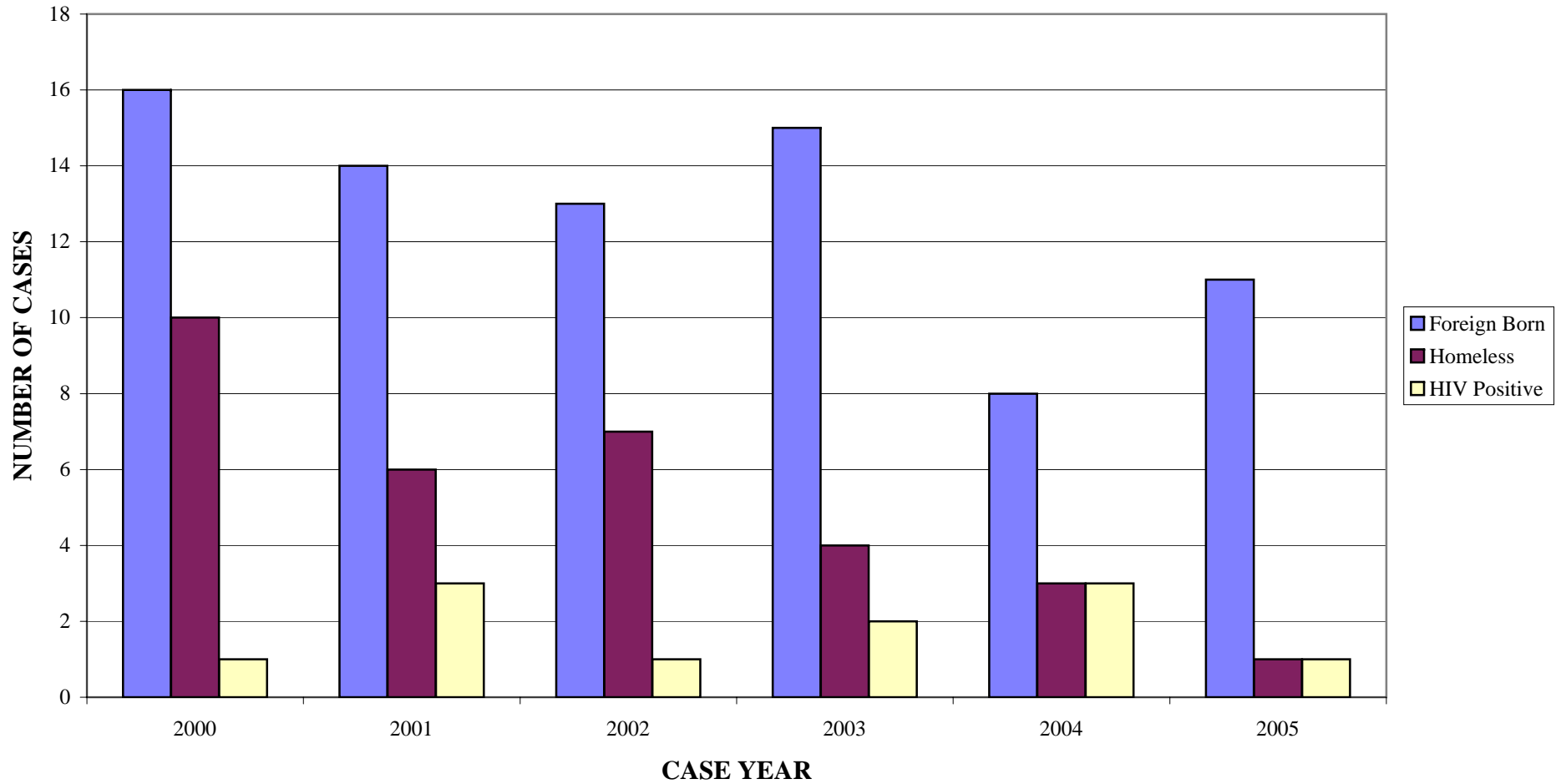
# TUBERCULOSIS CASE RATES KANSAS CITY RESIDENTS 1995-2005



\*BASED ON KANSAS CITY 2000 CENSUS POPULATION DATA

Communicable Disease Prevention  
2005 Annual Report

**TUBERCULOSIS CASES BY RISK FACTOR  
KANSAS CITY RESIDENTS  
2000-2005**



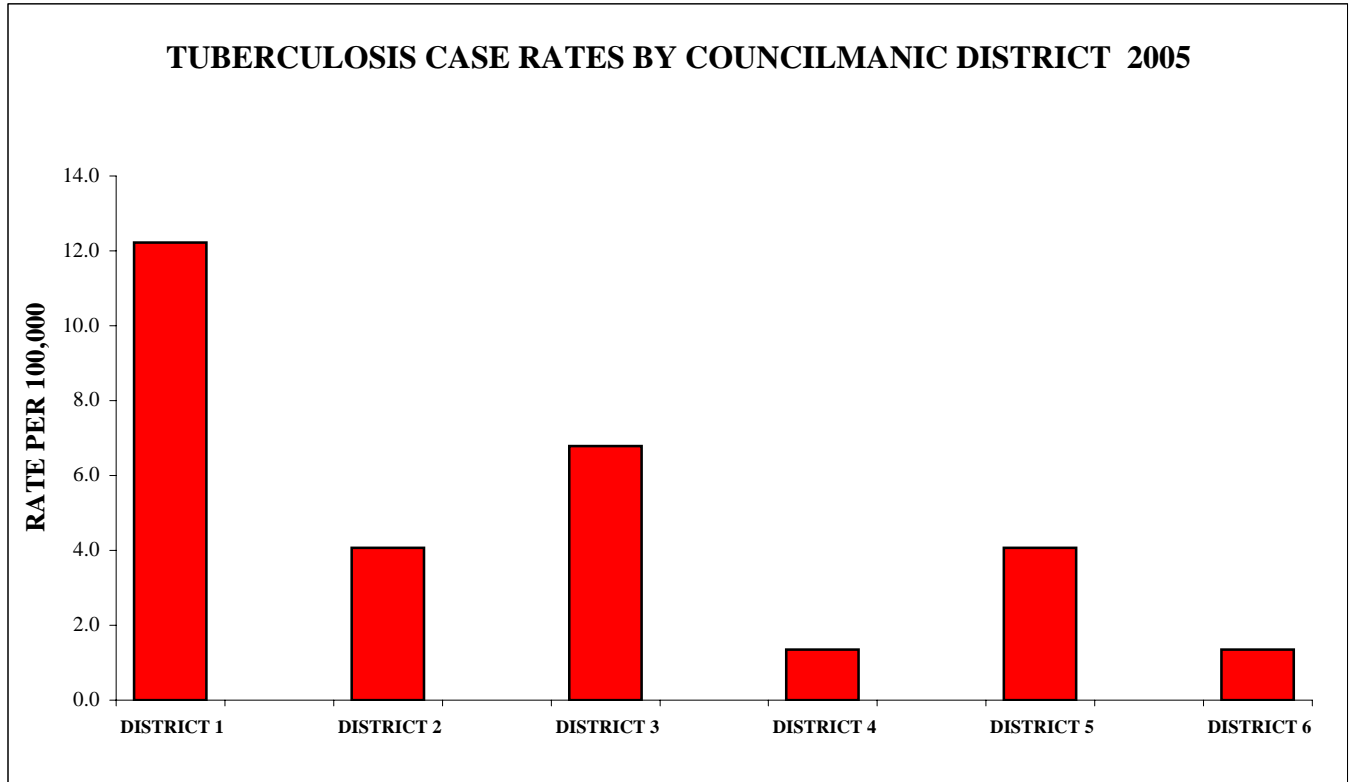
Communicable Disease Prevention  
2005 Annual Report

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

**REPORTED TUBERCULOSIS CASE RATES  
BY COUNCILMANIC DISTRICT  
RATE PER 100,000\*  
KANSAS CITY RESIDENTS  
2000-2005**

	2005	2004	2003	2002	2001	2000
DISTRICT 1	12.2	9.5	12.2	8.2	9.5	8.2
DISTRICT 2	4.1	2.7	6.8	4.1	6.8	5.4
DISTRICT 3	6.8	4.1	2.7	10.9	10.9	9.5
DISTRICT 4	1.4	5.4	4.1	0.0	2.7	8.2
DISTRICT 5	4.1	0.0	2.7	5.4	2.7	6.8
DISTRICT 6	1.4	4.1	1.4	1.4	5.4	8.2
UNKNOWN	[2]	[2]	[4]	[6]	[4]	[8]

\*POPULATION PER DISTRICT IS APPROXIMATELY 73,600



**TUBERCULOSIS CASES  
THERAPY OUTCOME  
2000-2005**

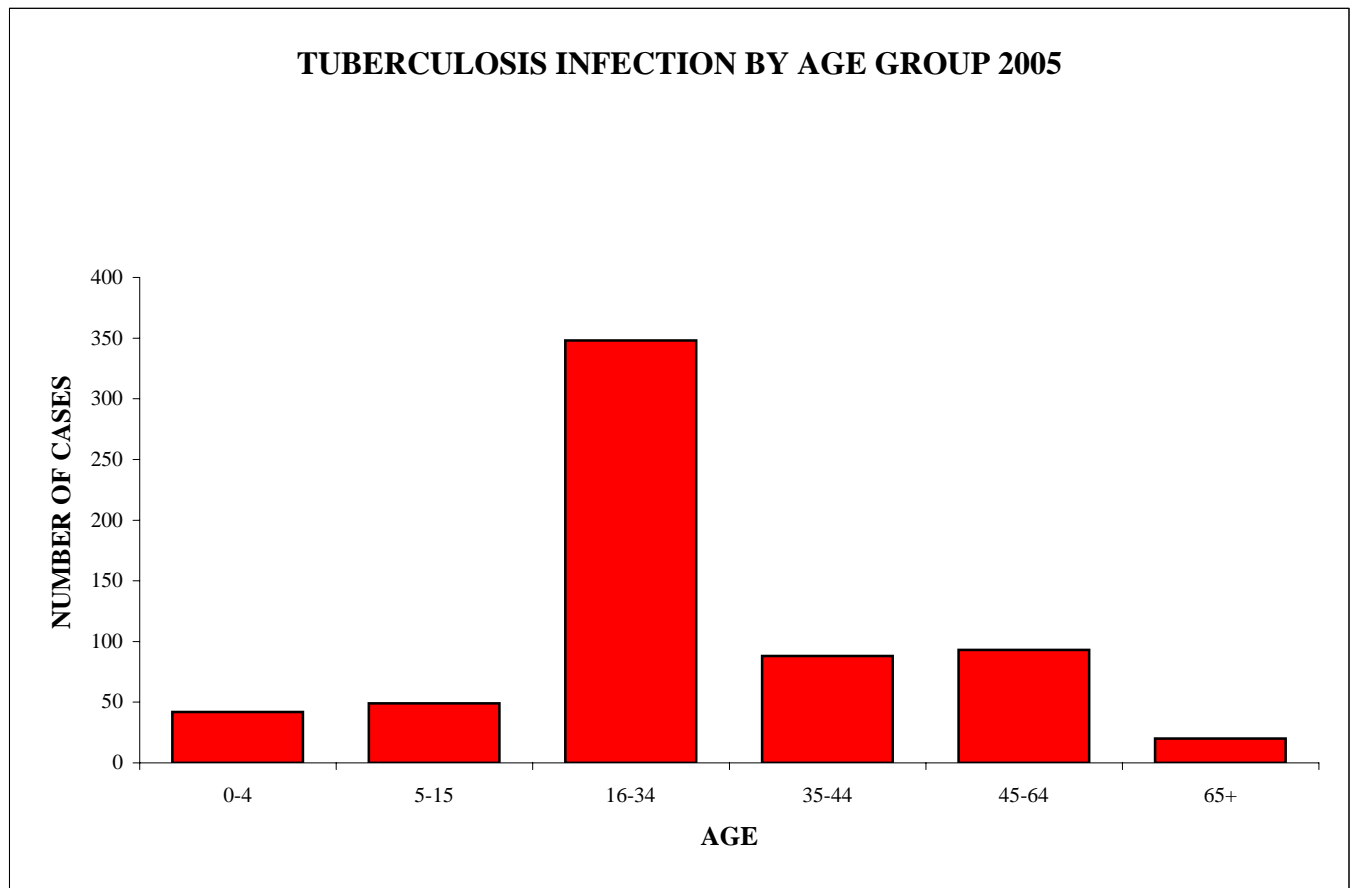
	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>NEW CLIENTS ADDED DURING YEAR</b>	24	21	26	28	32	42
<b>CLIENTS CLOSED TO SUPERVISION</b>	16	20	26	28	32	42
CLIENT COMPLETED THERAPY	11	13	19	23	27	38
CLIENT MOVED TO NEW JURISDICTION	2	3	3	0	2	2
THERAPY SUSPENDED MEDICALLY	0	0	0	0	0	0
NO TREATMENT ORDERED BY PHYSICIAN	0	0	0	1	0	0
CLIENT DIED	3	4	1	4	2	2
LOST TO FOLLOWUP	0	0	3	0	1	0
<b>STILL ACTIVE AT YEAR END 2005</b>	8	1	0	0	0	0

**REPORTED TUBERCULOSIS INFECTION  
AND INFECTION RATES PER 100,000  
KANSAS CITY RESIDENTS  
1996 - 2005**

<b>YEAR</b>	<b>POPULATION</b>	<b>TB INFECTION</b>	<b>INFECTION RATE</b>
1996	438,986	489	111.4
1997	439,626	715	162.6
1998	440,266	830	188.5
1999	440,906	776	176.0
2000	441,545	679	153.8
2001	441,545	797	180.5
2002	441,545	553	125.2
2003	441,545	496	112.3
2004	444,387	544	122.4
2005	444,387	650	146.3

**REPORTED CASES  
OF TUBERCULOSIS INFECTION  
BY AGE, RACE AND SEX  
KANSAS CITY RESIDENTS  
2005**

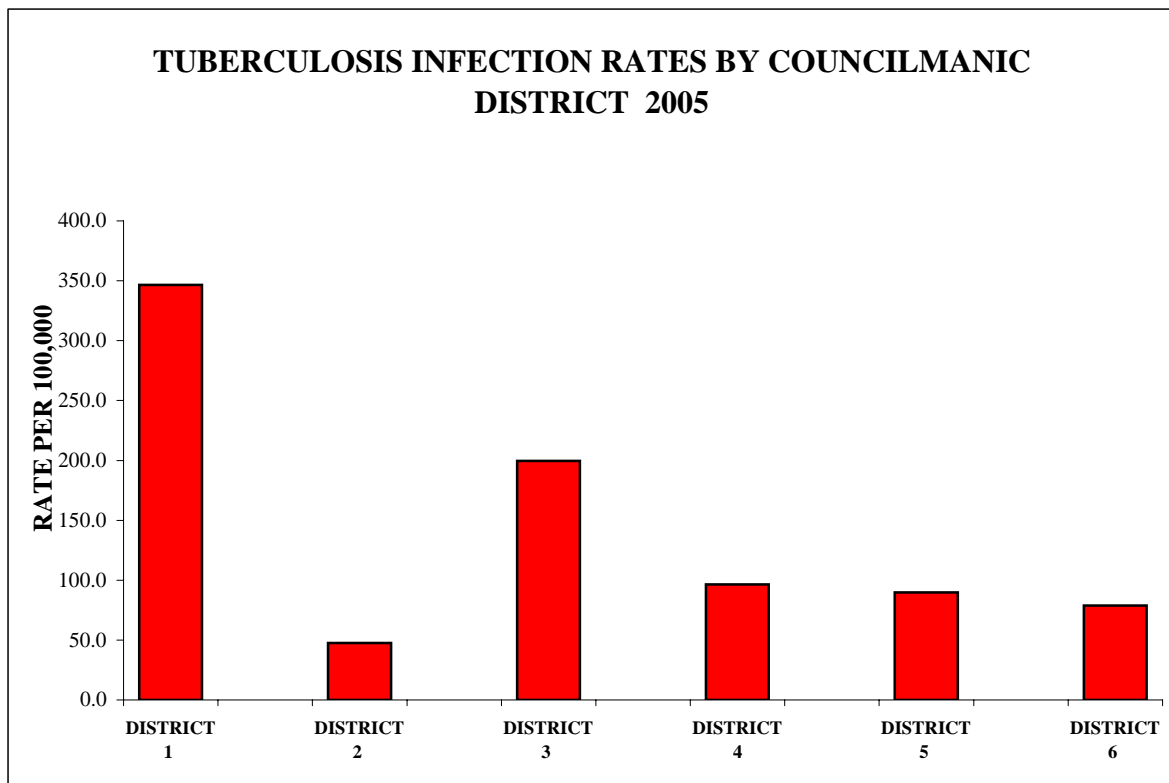
AGE	MALE						FEMALE						AGE SUB TOTAL	AGE TOTAL
	ASIAN	HISP	BLACK	UNK	WHITE	TOTAL	ASIAN	HISP	BLACK	UNK	WHITE	TOTAL		
	0-4	0	8	15	0	3	26	3	6	6		1		
5-15	2	12	10	1	1	26	4	8	10		1	23	49	
16-34	12	23	63	3	7	108	28	116	62	15	19	240	348	
35-44	2	4	23	3	4	36	10	15	19	4	4	52	88	
45-64	4	16	32	1	8	61	1	1	22	3	5	32	93	
65+	0	1	5	0	3	9	0	2	6	1	2	11	20	
Unknown	0	0	1	0	0	1	0	6	2	1	0	9	10	
Grand Total	20	64	149	8	26	267	46	154	127	24	32	383	650	



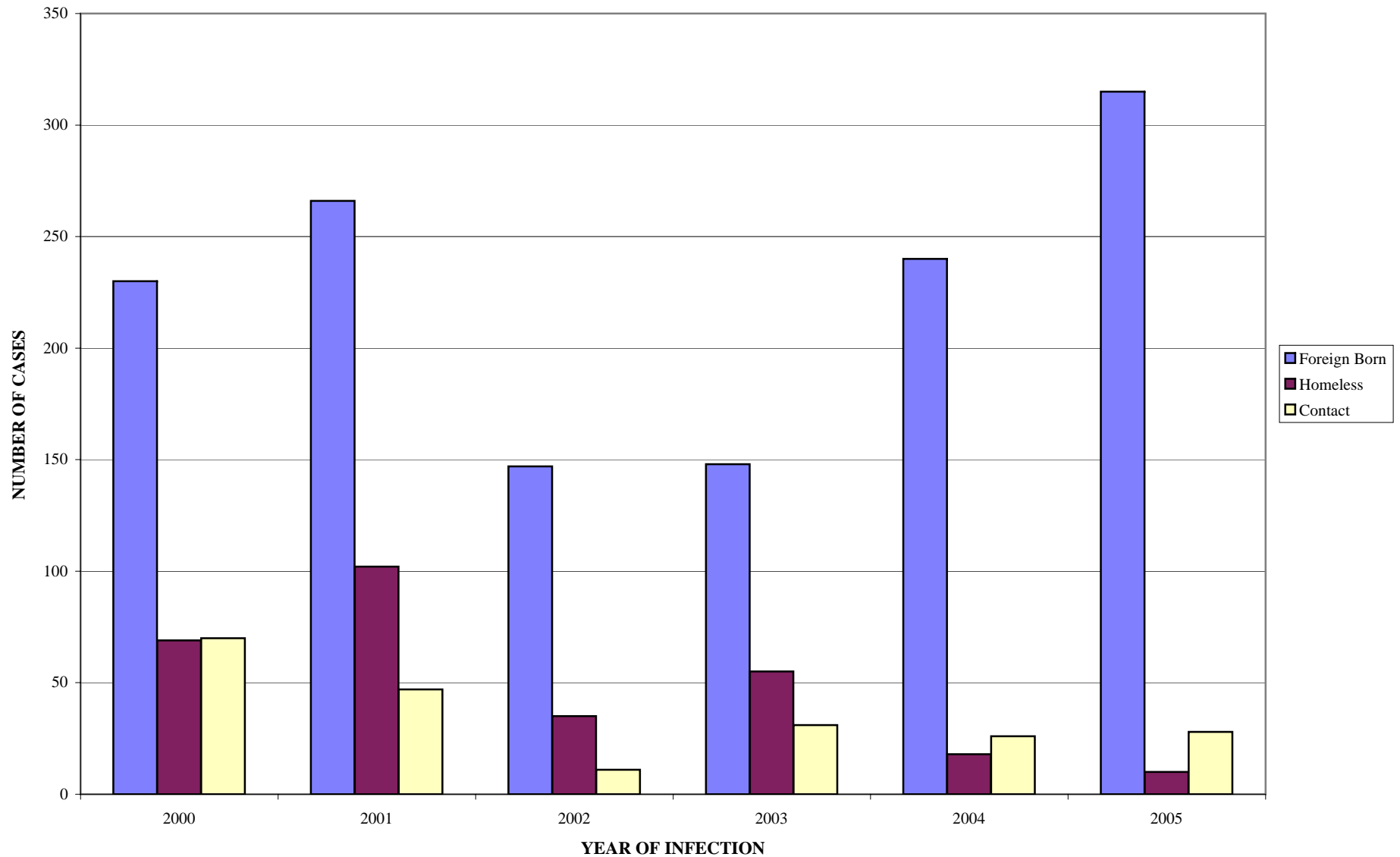
**REPORTED TUBERCULOSIS INFECTION  
BY COUNCILMANIC DISTRICT  
RATE PER 100,000\*  
KANSAS CITY RESIDENTS  
2000-2005**

	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
DISTRICT 1	346.5	191.6	195.7	195.7	284.0	263.6
DISTRICT 2	47.6	39.4	62.5	100.5	119.6	97.8
DISTRICT 3	199.7	214.7	127.7	144.0	222.8	220.1
DISTRICT 4	96.5	73.4	70.7	81.5	112.8	81.5
DISTRICT 5	89.7	53.0	78.8	97.8	127.7	122.3
DISTRICT 6	78.8	47.6	47.6	72.0	78.8	65.2
UNKNOWN	[18]	[52]	[55]	[44]	[103]	[58]

\*POPULATION PER DISTRICT IS APPROXIMATELY 73,600



**TUBERCULOSIS INFECTIONS BY RISK FACTOR  
KANSAS CITY, MISSOURI  
2000-2005**

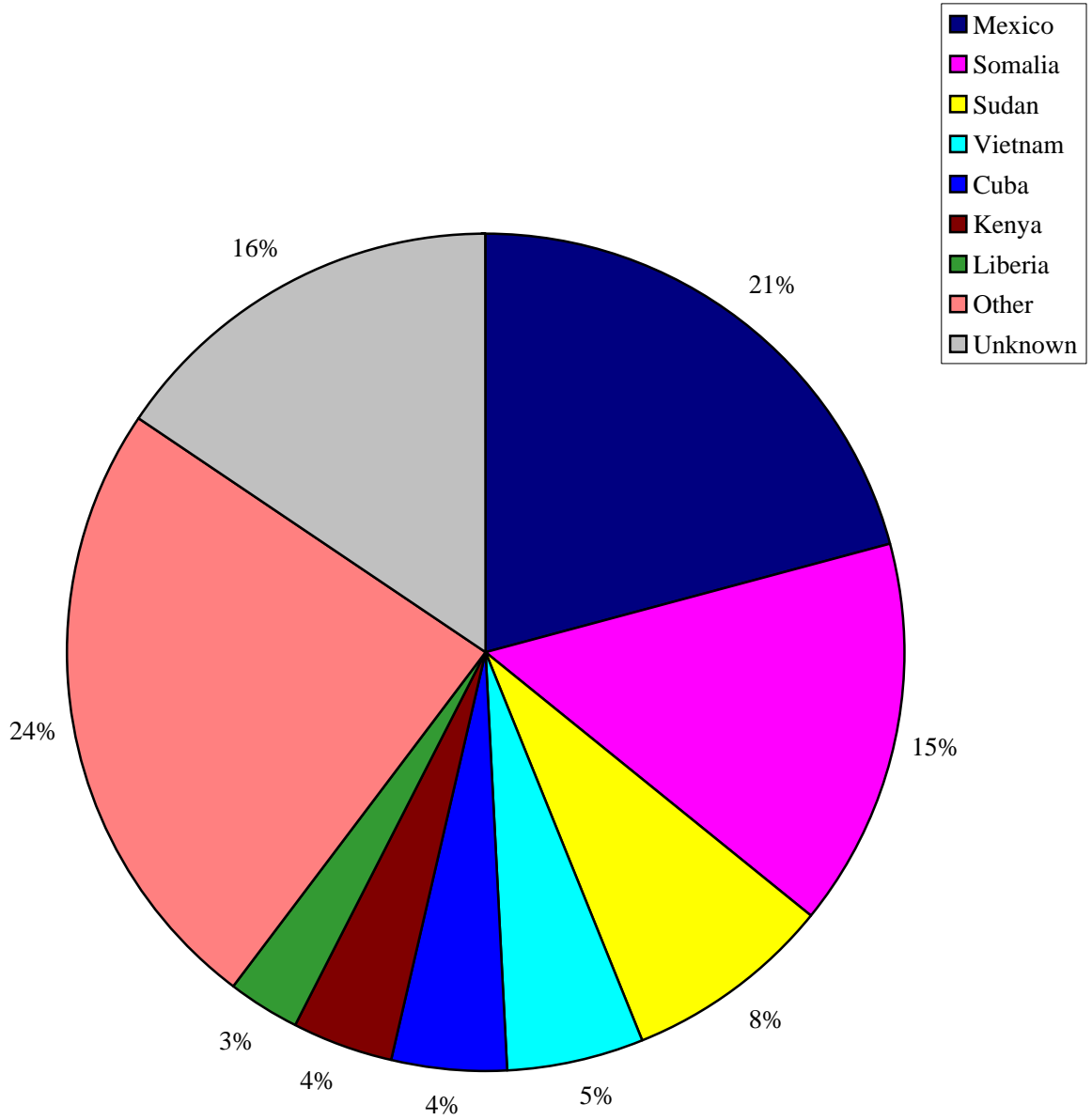


Other risk factors include: employee in a high-risk setting (10% of total infections), IV drug use (<1%), recent history of incarceration (4.2%), alcohol abuse (5.1%), nursing home resident (<1%) and HIV infection (<1%)

**TUBERCULOSIS CONTROL  
PREVENTIVE THERAPY  
JAN 1, 2005 - DEC 31, 2005**

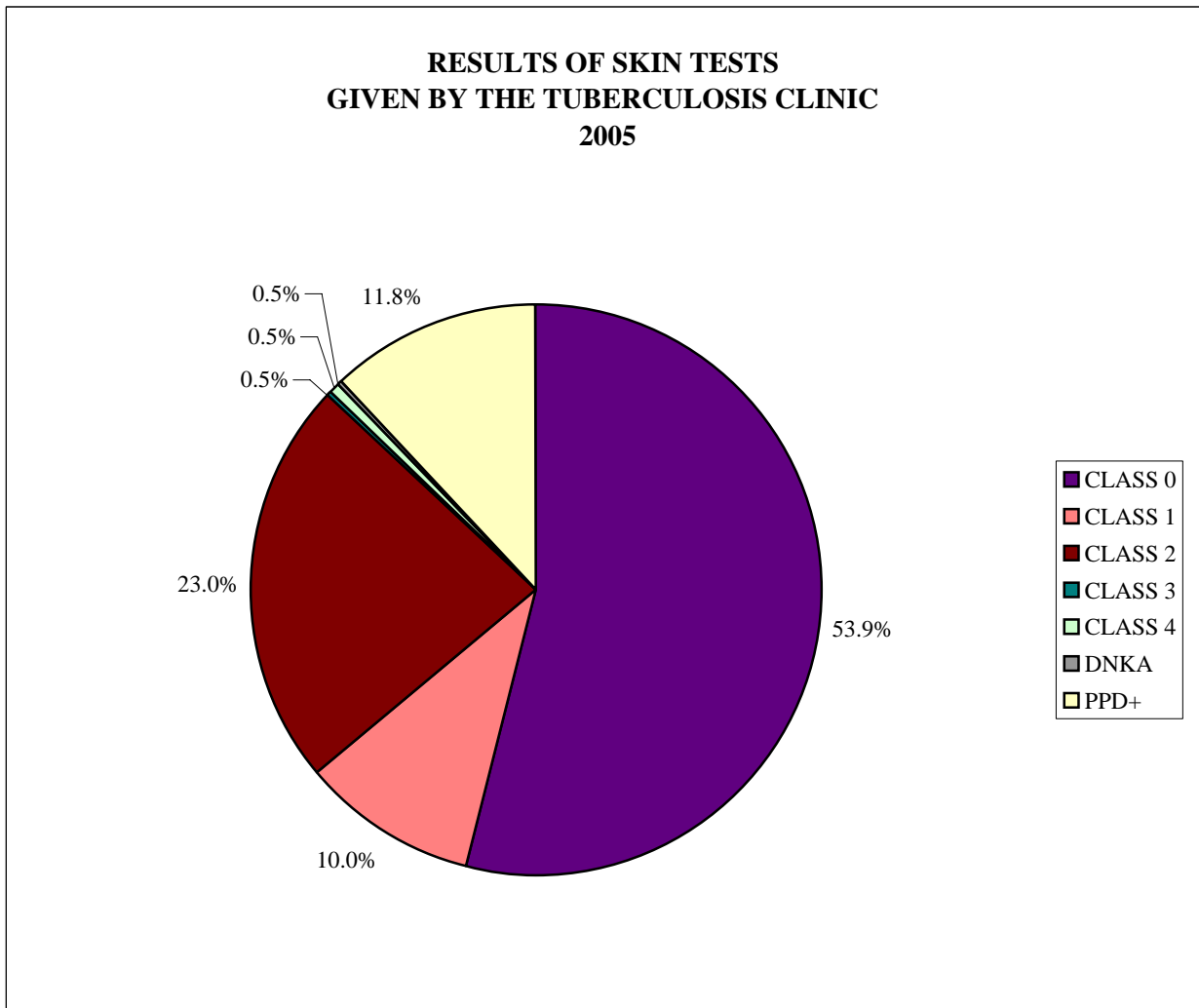
	<b>CONTACTS</b>	<b>CONVERTERS</b>	<b>OTHERS</b>	<b>TOTAL</b>
<b>CLIENTS EVALUATED</b>	<b>28</b>	<b>37</b>	<b>585</b>	<b>650</b>
>15 YEARS	21	34	504	559
=< 15 YEARS	7	3	81	91
<b>COMPLETED THERAPY</b>	<b>2</b>	<b>1</b>	<b>33</b>	<b>36</b>
<b>INCOMPLETE THERAPY</b>				
DECEASED	0	1	1	2
LOST TO FOLLOWUP	0	0	30	30
MEDS DC BY PHYSICIAN	0	0	1	1
MOVED	0	1	16	17
NO RESPONSE	2	3	11	16
NO TREATMENT ORDERED	0	0	7	7
NON COMPLIANT	8	6	31	45
PREVIOUSLY TREATED	0	0	3	3
REFUSED TREATMENT	0	0	4	4
OTHER	0	1	59	60
PENDING (STILL OPEN)	16	24	389	429

**TB INFECTION AMONG FOREIGN-BORN IMMIGRANTS  
KANSAS CITY, MISSOURI  
2005 (n=315)**



## TUBERCULOSIS CLINIC ACTIVITIES 2000 - 2005

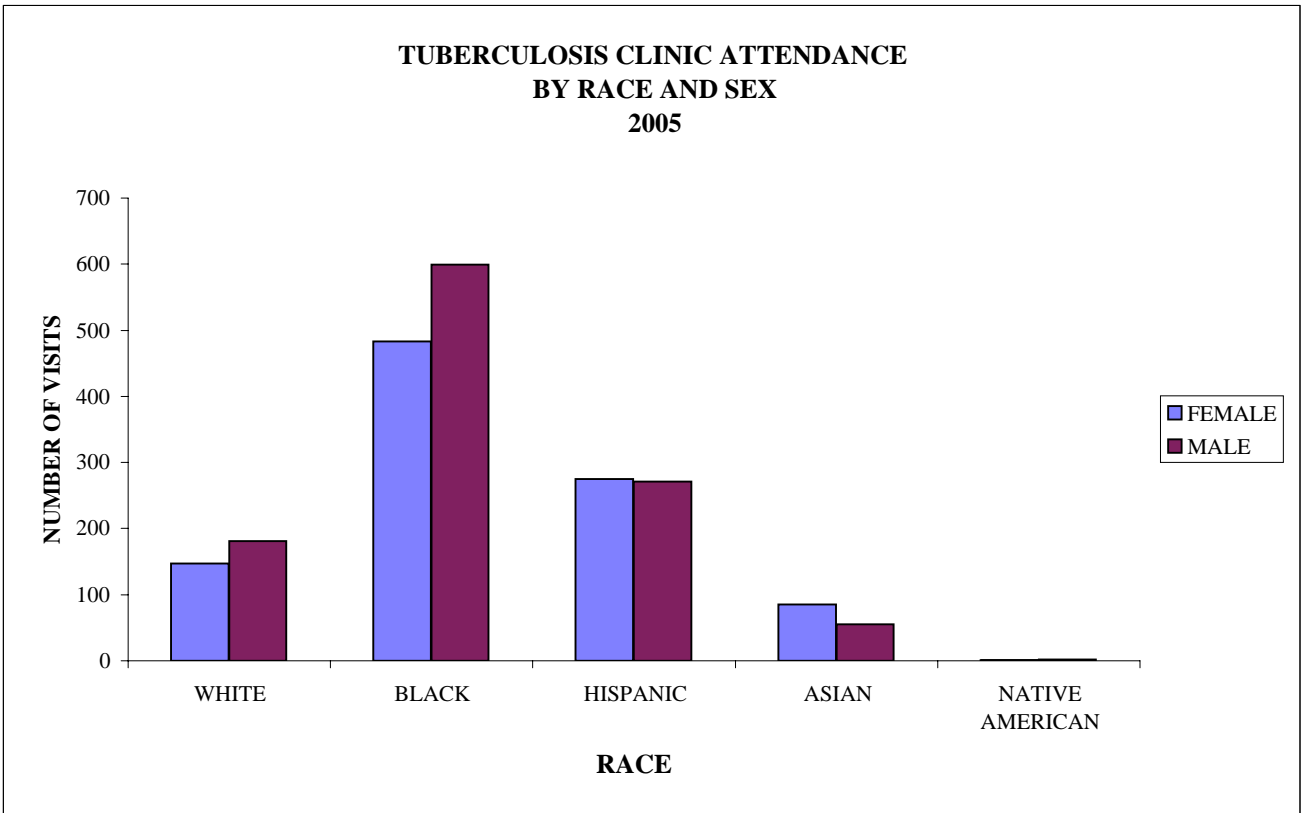
	2005	2004	2003	2002	2001	2000
MANTOUX TESTS GIVEN	469	989	271	717	531	444
NUMBER POSITIVE	157	188	60	30	52	85
PERCENT POSITIVE	33.5	19.0	22.1	4.2	9.8	19.1
CHEST X-RAYS	207	234	156	238	298	253
MEDICATION DELIVERIES	1805	1722	1726	1806	1869	2357



**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

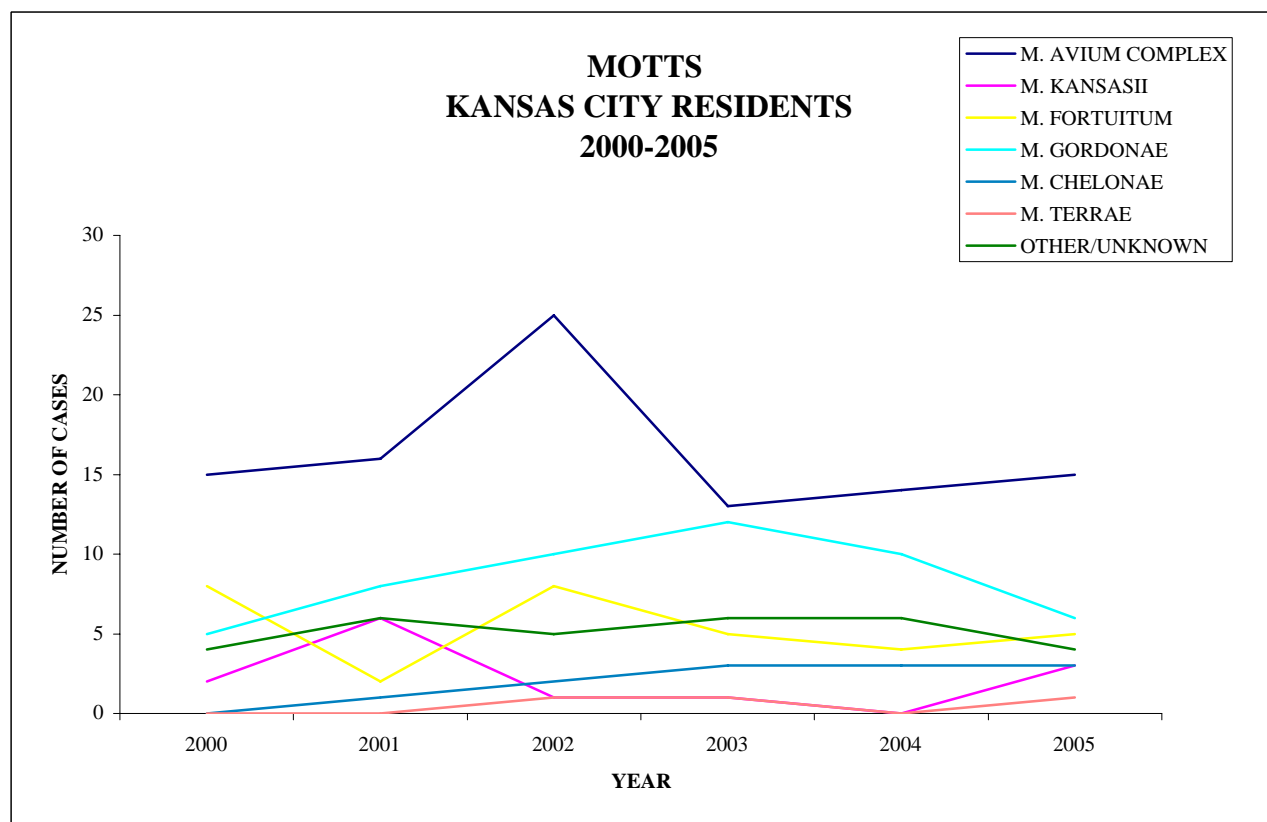
**TUBERCULOSIS CLINIC ATTENDANCE  
1998 - 2005**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<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>



**CASES OF INFECTION  
BY MYCOBACTERIA OTHER  
THAN TUBERCULOSIS (MOTT)  
2000 - 2005**

	2000	2001	2002	2003	2004	2005
KNOWN HIV CO-INFECTION	3	2	3	3	2	0
M. AVIUM COMPLEX	15	16	25	13	14	15
M. KANSASII	2	6	1	1	0	3
M. FORTUITUM	8	2	8	5	4	5
M. GORDONAE	5	8	10	12	10	6
M. CHELONAE	0	1	2	3	3	3
M. TERRAE	0	0	1	1	0	1
OTHER/UNKNOWN	4	6	5	6	6	4
TOTAL	34	39	52	41	37	37



### Tuberculosis Control Annual Activities 2005

