# Potential Years of Life Lost for Selected Disease Categories

CHA REPORT 2004

## **Definition/Description:**

Mortality data helps to identify opportunities for interventions to improve the health of the population, particularly where deaths are premature or preventable. Other measures that are being tracked in the Province of Manitoba as part of the ongoing health assessment activities include deaths due to all Cancers, deaths due to all Respiratory Diseases, and deaths due to all Circulatory Diseases. PYLL have also been calculated based on the above three category of diseases for the two time periods, 1990-1994 and 1995-1999.

Potential years of life lost (PYLL) is the number of years of life "lost" when a person dies prematurely before age 75. PYLL has been generated by cause of death as well as (overall measure) to better understand premature deaths in the WHR. PYLL have been used as an indicator to measure the impact of premature death, as it compares death occurrence and cause of death. PYLL only considers deaths before age 75 and weights them by age and by cause of death.

One limitation of this indicator is the setting of the arbitrary value of 75. This might give the impression that the younger years of life are more valuable, especially since the life expectancy for both males and females in the WHR exceed this value. PYLL should be interpreted carefully, as the number of PYLL in a disease category may be due to many deaths that occurred later in life (closer to the age of 75); or may be due to fewer deaths that occurred early in life (farther from the age of 75); or may be due to a combination of the above. It is for these reasons that this indicator provides only additional information and should be interpreted along with the information from the other mortality indicators.

#### Method

PYLL due to Cancer is the number of years of life "lost" when a person dies before age 75 due to cancer (ICD-9 140-208)

PYLL due to Circulatory Disease is the number years of life "lost" when a person dies before age 75 due to circulatory disease (ICD-9 390-459)

PYLL due to Respiratory Disease is the number of years of life "lost" when a person dies before age 75 due to respiratory disease (ICD-9 460-519).

#### Source:

The death data used in this report was obtained from Vital Statistics Agency, Consumer and Corporate Affairs, Manitoba Finance and Manitoba Bureau of Statistics, Government of Manitoba. All numerical values, tables, and figures (including spatial analyses) were generated by the Population Health and Health System Anlysis Unit, Winnipeg Regional Health Authority.

For further information, a comprehensive Mortality Report, Winnipeg Regional Health Authority, 2004, can be found at

http://www.wrha.mb.ca/howcare/decsup/files/population/WRHAMortalityReport2004.pdf

Findings:

## Potential Years of Life Lost by Selected Disease Categories, 1995-1999

		PYLL All Cancers ICD-9 (140-208)			PYLL All Respiratory Disease ICD-9 (460-519)			PYLL All Circulatory Disease ICD-9 (390-459)			
Community Area	Neighbourhood Cluster	Both Sexes	Females	Males	Both Sexes	Females	Males	Both Sexes	Females	Males	
St. James-Assiniboia	01A	2615	1242	1373	190	97	93	1611	410	1201	
	01B	2650	1443	1207	410	188	222	1665	488	1177	
Assiniboine South	002	2198	1256	942	135	51	83	1153	399	754	
Fort Garry	03A	2073	1038	1034	190	117	72	779	397	382	
	03B	1994	1197	797	270	134	136	788	320	468	
St. Vital	04A	2717	1557	1161	182	98	83	1472	596	876	
	04B	2382	1077	1305	735	455	280	932	364	567	
St. Boniface	05A	1408	720	687	104	14	90	985	352	633	
	05B	2236	1141	1096	97	54	43	962	211	752	
Transcona	006	2212	1139	1072	392	169	223	1380	339	1041	
River East	07A	1486	773	714	334	65	269	1175	502	673	
	07B	2968	1402	1567	198	85	113	1709	582	1127	
	07C	1625	765	861	190	164	27	1073	276	797	
	07D	435	267	168	15	0	15	299	110	189	
Seven Oaks	08A	1132	615	517	88	43	46	910	347	563	
	08B	3162	1775	1387	222	98	124	1617	606	1011	
	08C	354	171	183	17	7	10	210	50	160	
Inkster	09A	996	586	410	102	54	48	604	213	391	
	09B	1018	310	708	130	103	28	934	263	671	
Point Douglas	10A	2103	1129	974	333	141	192	1669	535	1134	
	10B	1418	578	840	290	170	119	1392	543	848	
Downtown	11A	2591	1127	1464	573	195	378	2037	582	1455	
	11B	3173	1103	2070	779	292	487	3404	962	2442	
River Heights	12A	2478	1325	1154	270	41	229	1374	394	979	
	12B	1889	1019	870	286	113	173	933	337	596	
Winnipeg Health Region		49315	24755	24560	6531	2947	3583	31067	10178	20889	
Group Selected Disease Categories as a Percentage of Total Deaths in WHR		30.1	37.0	25.3	4.0	4.4	3.7	18.9	15.2	21.5	

### Potential Years of Life Lost by Selected Disease Categories, 1990-1994

		PYLL All Cancers ICD-9 (140-208)			PYLL All Respiratory Disease ICD-9 (460-519)			PYLL All Circulatory Disease ICD-9 (390-459)		
Community Area	Neighbourhood Cluster	Both Sexes	Females	Males	Both Sexes	Females	Males	Both Sexes	Females	Males
St. James-Assiniboia	01A	2684	1233	1451	138	54	84	1561	465	1095
	01B	2547	1212	1335	404	187	218	1631	580	1050
Assiniboine South	002	1974	996	978	208	92	116	1208	429	779
Fort Garry	03A	1551	897	653	272	65	207	769	326	443
Tort Garry	03B	1927	915	1012	304	45	259	984	266	718
St. Vital	04A	1902	1054	848	279	204	75	1059	420	639
St. Vital	04B	1627	730	897	762	405	356	1143	444	698
Ct. Denifore	05A	1458	778	681	128	33	94	1087	324	762
St. Boniface	05B	2204	1065	1139	269	135	134	917	229	688
Transcona	006	2218	1041	1177	149	92	58	1388	437	952
	07A	1213	436	777	82	62	20	919	298	621
River East	07B	2992	1415	1577	259	69	190	1714	576	1137
River East	07C	1539	618	920	26	20	6	1075	338	737
	07D	76	7	69	0	0	0	57	0	57
	08A	1255	817	438	55	32	23	935	296	639
Seven Oaks	08B	2406	1135	1271	147	55	93	1926	571	1354
	08C	174	112	62	13	13	0	191	102	89
Inkator	09A	659	422	237	219	145	74	365	183	182
Inkster	09B	1212	466	746	184	55	129	926	263	663
Doint Douglas	10A	1909	1013	897	145	24	121	1672	570	1102
Point Douglas	10B	1254	411	843	414	104	311	1481	395	1086
Downtown	11A	2298	1099	1199	458	223	235	1569	528	1041
	11B	2454	863	1592	803	310	494	3080	817	2263
River Heights	12A	2469	1383	1086	178	107	72	1664	739	925
	12B	1730	994	737	175	78	97	1110	348	762
Winnipeg Health Region*		43733	21112	22621	6073	2607	3465	30432	9946	20486
Group Selected Disease Categories as a Percentage of Total Deaths in WHR		27.3	34.1	23.1	3.8	4.2	3.5	19.0	16.1	20.9

# **Highlights:**

- Over half (53%) of all PYLL were also attributed to three categories of diseases:
  - All Cancers (30.1%)
  - All Circulatory Diseases (18.9%)
  - All Respiratory Diseases (4.0%)
- Similar proportions are reflected for both males and females and for the two time periods with slight increases for both sexes.