

Exercise 3- Direct Age Adjustment w/ YR 2000 Standard Population (10 pts)

Please apply the direct method of age standardization to the following data sets. Please use the directions below. Remember to show all of your work and fill in the appropriate blanks in the table. **Please use rate per 1000 and report the rate to 1 decimal place.**

Directions

In this exercise you are given a standard population: the Year 2000 Standard Population. Using the tables provided please use the direct method of age adjustment to determine the standard mortality ratio (SMR) for the Bethel Park, Plum, and State College boroughs. Note that the age groups from the various tables are not the same, please use the age ranges provided in the tables below (you will have to combine age groups from the other tables). Also note that the age groups in Census Table P12 (below) are by gender and need to be combined per age group.

Bethel Park

Age	Pop	Deaths	Std Pop	Age Specific	Expected Rate
0-4					
5-14					
15-24					
25-34					
35-44					
45-54					
55-64					
65-74					
75-84					
>85					
Total					

Calculation: _____

SMR per 1000: _____

Plum

Age	Pop	Deaths	Std Pop	Age Specific	Expected Rate
0-4					
5-14					
15-24					
25-34					
35-44					
45-54					
55-64					
65-74					
75-84					
>85					
Total					

Calculation: _____

SMR per 1000: _____

State College

Age	Pop	Deaths	Std Pop	Age Specific	Expected Rate
0-4					
5-14					
15-24					
25-34					
35-44					
45-54					
55-64					
65-74					
75-84					
>85					
Total					

Calculation: _____

SMR per 1000: _____

Table C-36
**Resident Deaths by Age Group for Selected Municipalities
 Pennsylvania, 2002**

Municipality	Age at Death (In Years)												
	Total Deaths*	Under 5	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85 & Over
State Total	129,396	1,235	107	182	558	815	1,613	3,868	7,438	11,568	21,789	41,050	39,121
Allentown	1,124	23	0	3	4	5	19	46	65	95	153	349	362
Altoona	658	3	1	0	1	3	4	28	49	62	119	211	177
Bethel Park	313	1	0	0	1	2	2	5	11	19	63	114	95
Bethlehem	880	6	0	2	4	4	12	17	41	71	132	312	279
Chester	411	8	0	0	3	3	7	24	45	71	68	102	80
Easton	285	1	0	0	0	1	4	16	25	32	54	70	82
Erie	1,187	25	1	2	8	4	14	45	69	105	195	413	306
Harrisburg	575	11	0	1	4	6	14	28	58	74	106	139	134
Hazleton	358	1	0	0	2	1	2	15	15	23	62	124	113
Johnstown	472	6	0	0	2	4	2	12	27	36	81	165	137
Lancaster	503	12	0	2	2	5	9	21	56	53	74	139	130
Lebanon	265	3	0	1	0	2	4	6	25	21	38	81	84
McKeesport	395	3	0	1	2	2	1	13	30	37	75	104	127
Monroeville	304	2	0	0	0	0	4	7	13	16	41	109	112
New Castle	427	6	0	0	3	2	1	15	15	30	62	158	134
Norristown	376	7	1	1	0	4	8	18	48	48	61	95	82
Philadelphia	16,695	256	20	38	80	173	378	832	1,459	1,864	2,933	4,774	3,882
Pittsburgh	4,095	52	2	7	17	19	63	125	296	381	740	1,269	1,121
Plum	233	2	1	0	0	1	3	7	19	26	43	58	73
Pottstown	276	0	0	1	0	5	8	10	18	27	55	82	70
Reading	718	17	0	2	5	6	23	47	44	68	134	204	168
Scranton	1,157	7	0	1	2	4	10	39	52	98	187	398	359
State College	122	2	0	0	0	1	2	3	2	4	17	38	53
West Mifflin	302	0	0	0	0	0	1	7	14	16	44	135	85
Wilkes Barre	708	5	0	0	3	3	9	21	34	46	113	229	245
Williamsport	281	4	2	0	0	1	3	8	17	38	51	79	78
York	397	9	2	1	4	7	10	16	43	45	72	106	82
All Other Areas	95,879	763	77	119	411	547	996	2,437	4,848	8,162	16,016	30,993	30,471

Exercise 3 Data Set (Census Table P12)

	Bethel Park	Plum	State College		Bethel Park	Plum	State College
Male:	16,069	13,151	20,011	Female:	17,487	13,789	18,409
Under 5 years	933	863	363	Under 5 years	839	833	334
5 to 9 years	1,142	996	264	5 to 9 years	1,062	874	286
10 to 14 years	1,286	1,000	300	10 to 14 years	1,228	966	288
15 to 17 years	738	597	190	15 to 17 years	714	564	187
18 and 19 years	311	275	3,117	18 and 19 years	283	258	3,562
20 years	122	123	2,672	20 years	107	108	2,908
21 years	90	97	3,138	21 years	87	107	2,843
22 to 24 years	336	319	4,249	22 to 24 years	332	359	2,693
25 to 29 years	697	771	1,728	25 to 29 years	684	780	1,087
30 to 34 years	943	996	869	30 to 34 years	1,006	1,074	653
35 to 39 years	1,195	1,141	569	35 to 39 years	1,335	1,152	485
40 to 44 years	1,514	1,238	414	40 to 44 years	1,608	1,214	416
45 to 49 years	1,373	1,024	402	45 to 49 years	1,446	1,046	376
50 to 54 years	1,152	851	365	50 to 54 years	1,268	968	420
55 to 59 years	941	776	273	55 to 59 years	1,031	804	290
60 and 61 years	324	263	73	60 and 61 years	371	292	92
62 to 64 years	450	292	141	62 to 64 years	526	368	126
65 and 66 years	280	225	89	65 and 66 years	334	221	101
67 to 69 years	436	302	112	67 to 69 years	524	285	162
70 to 74 years	744	403	211	70 to 74 years	898	490	292
75 to 79 years	557	292	204	75 to 79 years	795	398	294
80 to 84 years	322	189	165	80 to 84 years	568	321	255
85 years and over	183	118	103	85 years and over	441	307	259