Geography 532 Name:_____
Geography of Environmental Health
Dr. Paul Marr

Exercise 1: Rate Calculations (10 pts)

Please calculate the age-specific morbidity and mortality rates for the four hypothetical census tracts. Use the values provided in the table to then determine the crude death, incidence, infant mortality, and the fatality rates. Please calculate the CDR, IR, and IMR as a rate per 1000. The FR should be calculated as a rate per 100 or percent. Carry all calculations out to 2 decimal places.

Census Tract 1

Age Group	Population	Cases	Deaths	Morbidity (x 1000)	Mortality (x 1000)
<1	731	311	76		
1-9	2536	432	73		
10-19	2211	245	23		
20-29	1903	98	12		
30-39	1784	101	5		
40-49	1590	75	4		
50-59	1488	45	18		
60-69	1275	122	35		
>70	812	103	40		
Total					

Crude Death Rate:

Incidence Rate:

Infant Mortality Rate:

Fatality Rate:

Census Tract 2

Age Group	Population	Cases	Deaths	Morbidity (x 1000)	Mortality (x 1000)
<1	246	82	7		
1-9	188	40	4		
10-19	123	21	11		
20-29	363	17	3		
30-39	577	29	6		
40-49	921	63	8		
50-59	492	45	21		
60-69	128	50	12		
>70	66	13	4		
Total					

Crude Death Rate:

Incidence Rate:

Infant Mortality Rate:

Fatality Rate:

Census Tract 3

Age Group	Population	Cases	Deaths	Morbidity (x 1000)	Mortality (x 1000)
<1	89	12	1		
1-9	72	15	3		
10-19	152	32	5		
20-29	188	43	4		
30-39	196	36	5		
40-49	243	54	3		
50-59	876	214	19		
60-69	921	265	37		
>70	744	221	56		
Total					

Crude Death Rate:

Incidence Rate:

Infant Mortality Rate:

Fatality Rate:

Census Tract 4

Age Group	Population	Cases	Deaths	Morbidity (x 1000)	Mortality (x 1000)
<1	23	0	0		
1-9	34	1	0		
10-19	172	5	0		
20-29	297	15	0		
30-39	3465	121	7		
40-49	4532	253	15		
50-59	879	88	5		
60-69	245	12	1		
>70	87	7	3		
Total					

Crude Death Rate:

Incidence Rate:

Infant Mortality Rate:

Fatality Rate: