

Exercise 4-Direct Age Adjustment (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

Since you are not given a standard population you must construct one. To do this you will need to sum the age specific populations from each town and use that as the standard population. For example, to create the standard age group population for age group 0-9 you would sum the populations for all the towns for that age group (eg. $37+126+53+221=437$). This must be done for each age group. Since this is a standard population, you only have to do it once and then use it for each of the towns.

Town A

| Age | Pop | Flu Deaths | Std Pop | Age Specific Rate | Expected Rate |
|-------|-----|------------|---------|-------------------|---------------|
| 0-9 | 37 | 4 | | | |
| 10-19 | 62 | 3 | | | |
| 20-29 | 194 | 11 | | | |
| 30-39 | 253 | 7 | | | |
| 40-49 | 213 | 5 | | | |
| 50-59 | 118 | 5 | | | |
| >60 | 76 | 6 | | | |
| Total | | | | | |

SMR per 1000: _____

Town B

| Age | Pop | Flu Deaths | Std Pop | Age Specific Rate | Expected Rate |
|-------|-----|------------|---------|-------------------|---------------|
| 0-9 | 126 | 12 | | | |
| 10-19 | 79 | 6 | | | |
| 20-29 | 212 | 21 | | | |
| 30-39 | 334 | 23 | | | |
| 40-49 | 476 | 21 | | | |
| 50-59 | 345 | 16 | | | |
| >60 | 234 | 19 | | | |
| Total | | | | | |

SMR per 1000: _____

Town C

| Age | Pop | Flu Deaths | Std Pop | Age Specific Rate | Expected Rate |
|-------|-----|------------|---------|-------------------|---------------|
| 0-9 | 53 | 7 | | | |
| 10-19 | 98 | 12 | | | |
| 20-29 | 107 | 23 | | | |
| 30-39 | 287 | 12 | | | |
| 40-49 | 389 | 7 | | | |
| 50-59 | 498 | 9 | | | |
| >60 | 390 | 11 | | | |
| Total | | | | | |

SMR per 1000: _____

Town D

| Age | Pop | Flu Deaths | Std Pop | Age Specific Rate | Expected Rate |
|-------|-----|------------|---------|-------------------|---------------|
| 0-9 | 221 | 23 | | | |
| 10-19 | 234 | 28 | | | |
| 20-29 | 487 | 23 | | | |
| 30-39 | 687 | 16 | | | |
| 40-49 | 257 | 15 | | | |
| 50-59 | 124 | 11 | | | |
| >60 | 54 | 6 | | | |
| Total | | | | | |

SMR per 1000: _____