Table 1: Reported Cases of Tuberculosis and Incidence Rates, by Regions, Kingdom of Saudi Arabia, January 2018 – December 2018

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Saudi** | | **Non-Saudi** | | | | **Total** | | | | |
| **The region** | **#** | **IR** | **#** | | **IR** | | **#** | | **IR** | | **95% CI** |
| Riyadh | 299 | 6.3 | 420 | | 11.3 | | 719 | | 8.5 | | 7.91 – 9.16 |
| Makkah | 89 | 7.3 | 124 | | 10.5 | | 213 | | 8.9 | | 7.80 – 10.21 |
| Jeddah | 375 | 17.8 | 523 | | 19.6 | | 898 | | 18.8 | | 17.64 – 20.11 |
| Taif | 56 | 5.5 | 76 | | 24 | | 132 | | 9.9 | | 8.35 – 11.75 |
| Madinah | 24 | 1.7 | 29 | | 3.6 | | 53 | | 2.4 | | 1.85 – 3.16 |
| Qasim | 19 | 1.8 | 23 | | 5.3 | | 42 | | 2.8 | | 2.13 – 3.9 |
| Eastern | 112 | 5.9 | 169 | | 11.7 | | 281 | | 8.4 | | 7.53 – 9.51 |
| Alahsa | 13 | 1.3 | 19 | | 6.5 | | 32 | | 2.5 | | 1.80 – 3.60 |
| Hafr albatin | 13 | 3.6 | 16 | | 16.1 | | 29 | | 6.3 | | 4.41 – 9.10 |
| Aseer | 32 | 2.1 | 40 | | 9.8 | | 72 | | 3.8 | | 3.06 – 4.86 |
| Bishah | 12 | 3.7 | 13 | | 17.1 | | 25 | | 6.2 | | 4.25 – 9.26 |
| Tabouk | 8 | 1 | 10 | | 5.1 | | 18 | | 1.9 | | 1.22 – 3.05 |
| Hail | 6 | 1.1 | 12 | | 7.1 | | 18 | | 2.5 | | 1.59 – 3.97 |
| Northen | 5 | 1.6 | 6 | | 7.5 | | 11 | | 2.9 | | 1.63 – 5.24 |
| Jazan | 146 | 11.8 | 208 | | 55.4 | | 354 | | 22 | | 19.89 – 24.5 |
| Najran | 16 | 3.5 | 18 | | 11.9 | | 34 | | 5.7 | | 4.08 – 7.97 |
| Al-bahah | 7 | 1.8 | 11 | | 11.2 | | 18 | | 3.6 | | 2.33 – 5.84 |
| Al-jouf | 4 | 1.5 | 5 | | 5.2 | | 9 | | 2.5 | | 1.36 – 4.92 |
| Qurayyat | 7 | 5.2 | 10 | | 25.3 | | 17 | | 9.8 | | 6.12 – 15.72 |
| Qunfudah | 8 | 3 | 8 | | 16 | | 16 | | 5 | | 3.10 – 8.19 |
| **Total** | 1251 |  | 1740 | |  | | 2991 | |  | |  |
|  |  |  |  |  |  |  | |  | |  | |

\*IR= Incidence rate per 100,000 population

\*CI = Confidence Interval

In this table, I want you to check the IR and the 95% CI out. Are they calculated correctly? And what is the best to calculate the 95% CI for only the total or to calculate it for all( Saudi, Non-Saudi, and the total) individually?

Table 2. Reported Cases of Tuberculosis and Incidence Rates, by Months, Kingdom of Saudi Arabia, January 2018 – December 2018

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Saudi** | | **Non-Saudi** | | **Total** | |
| **Months** | **#** | **IR** | **#** | **IR** | **#** | **IR** |
| January | 108 | 0.52 | 140 | 1.11 | 248 | 0.74 |
| |  | | --- | | February | | 107 | 0.52 | 122 | 0.96 | 229 | 0.69 |
| March | 131 | 0.63 | 186 | 1.47 | 317 | 0.95 |
| April | 95 | 0.46 | 168 | 1.33 | 263 | 0.79 |
| May | 115 | 0.55 | 129 | 1.02 | 244 | 0.73 |
| June | 78 | 0.38 | 93 | 0.74 | 171 | 0.51 |
| July | 105 | 0.51 | 140 | 1.11 | 245 | 0.73 |
| August | 79 | 0.38 | 136 | 1.08 | 215 | 0.64 |
| September | 105 | 0.51 | 156 | 1.23 | 261 | 0.78 |
| October | 137 | 0.66 | 198 | 1.57 | 335 | 1 |
| November | 101 | 0.49 | 152 | 1.20 | 253 | 0.76 |
| December | 90 | 0.43 | 120 | 0.95 | 210 | 0.63 |
| **Total** | **1251** | **6.02** | **1740** | **13.76** | **2991** | **8.95** |

\*IR= Incidence rate per 100,000 population

In this table I want you to check the IR.

Table 3: Reported Cases of Tuberculosis and Incidence Rates Among Non-Saudi Residents, by Region, Kingdom of Saudi Arabia, January 2018 – December 2018.

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **#** | **IR\*** | **95% CI** |
| Riyadh | 420 | 11.33 | 10.3 -12.47 |
| Makkah | 124 | 10.55 | 8.85 -12.58 |
| Jeddah | 523 | 19.62 | 18.01 - 21.37 |
| Taif | 76 | 24.08 | 19.24 - 30.13 |
| Madinah | 29 | 3.68 | 2.56 - 5.29 |
| Qasim | 23 | 5.35 | 3.57 - 8.03 |
| Eastern | 169 | 11.71 | 10.07 - 13.61 |
| Alahsa | 19 | 6.54 | 4.19 - 10.21 |
| hafr albatin | 16 | 16.13 | 9.93 - 26.2 |
| Aseer | 40 | 9.87 | 7.25 - 13.44 |
| Bishah | 13 | 17.17 | 10.04 - 29.38 |
| Tabouk | 10 | 5.13 | 2.78 - 9.43 |
| Hail | 12 | 7.12 | 4.07 - 12.45 |
| Northen | 6 | 7.52 | 3.45 - 16.4 |
| Jazan | 208 | 55.45 | 48.41 - 63.51 |
| Najran | 18 | 11.99 | 7.59 - 18.96 |
| Al-bahah | 11 | 11.27 | 6.30 - 20.18 |
| Al-jouf | 5 | 5.28 | 2.26 - 12.37 |
| Qurayyat | 10 | 25.37 | 13.78 - 46.69 |
| Qunfudah | 8 | 16.01 | 8.11 - 31.59 |
| **Total** | **1740** |  |  |

\*IR= Incidence rate per 100,000 population

\*CI = Confidence Interval

In this table I want you to check the IR and 95% CI out. Are they calculated correctly ?

Table 4: Tuberculosis numbers and incidence rates per 100000 among Non-Saudi residents by Age Groups, 2018

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| quarters  **Age Group** | Q1 | | Q2 | | Q3 | | Q4 | | p-value |
| # | IR | # | IR | # | IR | # | IR |  |
| 0-4 | 9 | 0.071174 | 7 | 0.055358 | 9 | 0.071174 | 7 | 0.055358 |  |
| 5\_ 14 | 4 | 0.031633 | 3 | 0.023725 | 2 | 0.015816 | 0 | 0 |  |
| 15-29 | 178 | 1.407667 | 154 | 1.217869 | 143 | 1.130879 | 167 | 1.320677 |  |
| 30-59 | 225 | 1.779355 | 212 | 1.676548 | 246 | 1.945428 | 266 | 2.103593 |  |
| 60 and above | 32 | 0.253064 | 14 | 0.110715 | 32 | 0.253064 | 30 | 0.237247 |  |
| Total | **448** | **3.542893** | **390** | **3.084215** | **432** | **3.416361** | **470** | **3.716874** |  |

In this table I want you to find the p-value for each age group. Also I am not whether a good idea to divide the year into 4 quarters or calculate each month individually, what do you think?