**Table 1. Factors associated with dengue cases in different divisions using a generalized linear mixed model during 1 Jan 2023 and 31 Dec 2023.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Unadjusted IRR (95% CI)** | ***P*-value** | **Adjusted IRR (95% CI)** | ***P*-value** |
| Urban-rural ratio | 1.02 (1.02-1.03) | <0.001 | 1.04 (1.03 – 1.04) | <0.001 |
| Male-female ratio | 1.08 (0.97-1.21) | 0.177 | - | - |
| Population density | 0.99 (0.98 – 0.99) | 0.028 | 0.99 (0.99 – 1.00) | 0.056 |
| Distance from Dhaka (capital city) | 0.99 (0.98 – 0.99) | <0.001 | 0.99 (0.98 – 0.99) | 0.005 |
| Daily average temperature | 1.07 (1.06 – 1.08) | <0.001 | 1.13 (1.11 – 1.14) | <0.001 |
| Daily total rainfall | 1.01 (1.01 – 1.02) | <0.001 | 0.99 (0.98 – 0.99) | <0.001 |
| Daily average relative humidity | 1.07 (1.06 – 1.07) | <0.001 | 1.09 (1.08 – 1.10) | <0.001 |
|  |  |  |  |  |
| **Groups Name** | **Variance** | **Standard Deviation** |  |  |
| Location (Intercept) | 0.002 | 0.050 |  |  |
| **Akaike information criterion (AIC)** | **Bayesian Information Criterion (BIC)** | **Root Mean Square Error (RMSE)** | **Coefficient of determination (*R2)*** | **Intraclass correlation (ICC)** |
| 23720.90 | 23774.80 | 181.80 | 0.435 | 0.002 |

IRR = Incidence Risk Ratio

CI = Confidence Interval