Table 1: Test for variance among families and populations

Model: Dead ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mortality: 2019 | Family | 0.680 | 17.132 | 0.395 | 1 | 0.265 |
| Population | 1.088 | 24.853 | 6.430 | 1 | **0.0055** |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Dead ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + City\_dist

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mortality: 2019 | Family | 0.678 | 17.090 | 0.388 | 1 | 0.2665 |
| Population | 1.087 | 24.827 | 6.454 | 1 | **0.0055** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mortality: 2019 | Block | 6.975 | 0.073 |
| Distance to City Center | 0.144 | 0.705 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Dead ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Urb\_score

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mortality: 2019 | Family | 0.673 | 16.991 | 0.388 | 1 | 0.2665 |
| Population | 1.087 | 24.843 | 6.391 | 1 | **0.0055** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mortality: 2019 | Block | 7.023 | 0.071 |
| Urbanization Score | 0.403 | 0.525 |