Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Mortality: 2019 | Family | 0.64 | 16.280 | 0.467 |
| Population | 0.52 | 13.644 | **0.002** |

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 | p |
| --- | --- | --- | --- | --- |
| Mortality: 2019 | Family | 0.638 | 16.239 | 0.4685 |
| Population | 0.520 | 13.646 | **0.0015** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Mortality: 2019 | Block | 6.772 | 0.08 |
| Distance to City Center | 0.130 | 0.719 |

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 | p |
| --- | --- | --- | --- | --- |
| Mortality: 2019 | Family | 0.633 | 16.140 | 0.4685 |
| Population | 0.522 | 13.689 | **0.002** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Mortality: 2019 | Block | 6.818 | 0.078 |
| Urbanization Score | 0.364 | 0.546 |