Table 1: Test for variance among families and populations

Model: Dead ~ Block + (1 | Population) + (1 | Population:Family)

PVE for population: 13.644. PVE for family: 16.28

| Variable | Group | p |
| --- | --- | --- |
| Mortality: 2019 | Family | 0.467 |
| Population | **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:Family) + City\_dist

PVE for population: 13.646. PVE for family: 16.239

| Variable | Group | p |
| --- | --- | --- |
| Mortality: 2019 | Family | 0.4685 |
| Population | **0.0015** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | 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:Family) + Urb\_score

PVE for population: 13.689. PVE for family: 16.14

| Variable | Group | p |
| --- | --- | --- |
| Mortality: 2019 | Family | 0.4685 |
| Population | **0.002** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mortality: 2019 | Block | 6.818 | 0.078 |
| Urbanization Score | 0.364 | 0.546 |