My title*

My subtitle if needed

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First sentence. Second sentence. Third sentence. Fourth sentence.

- 1 Introduction
- 2 Data
- 3 Results
- 4 Discussion
- 5 Appendix
- 5.1 Additional data details
- 5.2 Model details
- 5.3 Posterior predictive check
- 6 References

^{*}Code and data are available at: https://github.com/JfpGilbert0/Ontario-CA-Mortality.

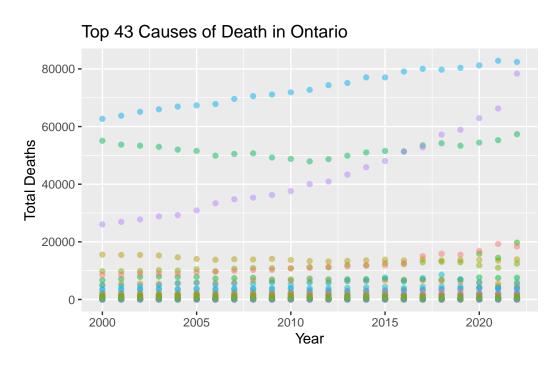


Figure 1: Visual of each value in the dataset, the number of deaths per year per cause. Each color corresponds to a cause

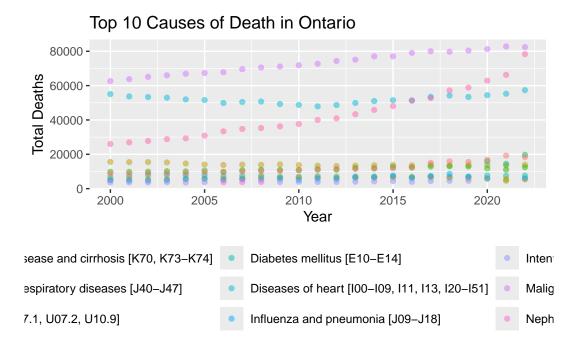


Figure 2: Visual of each value in the dataset, the number of deaths per year per cause. Each color corresponds to a cause

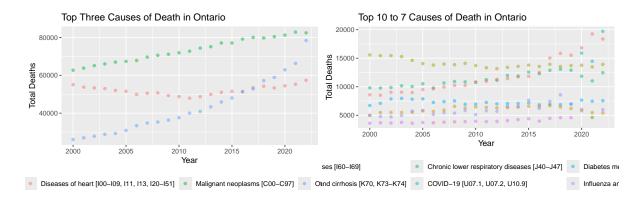


Figure 3: Visual of the trends in top threeFigure 4: Visual of the trends in top three causes versus the bottom seven.

causes versus the bottom seven.

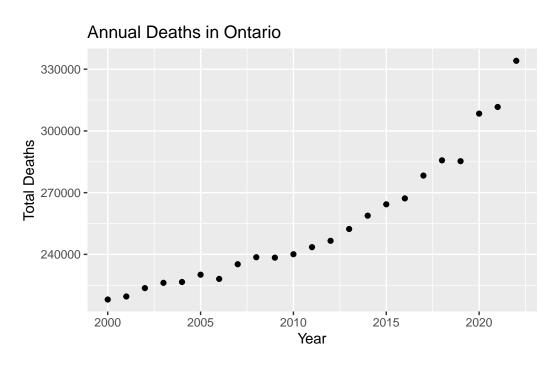


Figure 5: Visual of the total deaths in Ontairo from 2000 - 2022.

```
SAMPLING FOR MODEL 'count' NOW (CHAIN 1)
Chain 1:
Chain 1: Gradient evaluation took 0.0001
Chain 1: 1000 transitions using 10 leaps
                                                                                 3 seconds.
Chain 1: Adjust your expectations accord
Chain 1:
Chain 1:
                       1 / 2000 [ 0%]
Chain 1: Iteration:
Chain 1: Iteration: 200 / 2000 [ 10%]
Chain 1: Iteration: 400 / 2000 [ 20%]
                                                   5e+04
Chain 1: Iteration: 600 / 2000 [ 30%]
                                         (Warmup)
                                        Figurem6pModel regressing total deaths based
Chain 1: Iteration: 800 / 2000 [ 40%]
                                         (Warmup)n year.
Chain 1: Iteration: 1000 / 2000 [ 50%]
Chain 1: Iteration: 1001 / 2000 [ 50%]
                                         (Sampling)
Chain 1: Iteration: 1200 / 2000 [ 60%]
                                         (Sampling)
Chain 1: Iteration: 1400 / 2000 [ 70%]
                                         (Sampling)
Chain 1: Iteration: 1600 / 2000 [ 80%]
                                         (Sampling)
Chain 1: Iteration: 1800 / 2000 [ 90%]
                                         (Sampling)
Chain 1: Iteration: 2000 / 2000 [100%]
                                         (Sampling)
Chain 1:
Chain 1: Elapsed Time: 0.5 seconds (Warm-up)
Chain 1:
                        0.712 seconds (Sampling)
Chain 1:
                        1.212 seconds (Total)
Chain 1:
SAMPLING FOR MODEL 'count' NOW (CHAIN 2).
Chain 2:
Chain 2: Gradient evaluation took 5e-05 seconds
Chain 2: 1000 transitions using 10 leapfrog steps per transition would take 0.5 seconds.
Chain 2: Adjust your expectations accordingly!
Chain 2:
Chain 2:
Chain 2: Iteration:
                       1 / 2000 [ 0%]
                                         (Warmup)
Chain 2: Iteration: 200 / 2000 [ 10%]
                                         (Warmup)
Chain 2: Iteration: 400 / 2000 [ 20%]
                                         (Warmup)
Chain 2: Iteration: 600 / 2000 [ 30%]
                                         (Warmup)
Chain 2: Iteration:
                     800 / 2000 [ 40%]
                                         (Warmup)
Chain 2: Iteration: 1000 / 2000 [ 50%]
                                         (Warmup)
Chain 2: Iteration: 1001 / 2000 [ 50%]
                                         (Sampling)
Chain 2: Iteration: 1200 / 2000 [ 60%]
                                         (Sampling)
Chain 2: Iteration: 1400 / 2000 [ 70%]
                                         (Sampling)
Chain 2: Iteration: 1600 / 2000 [ 80%]
                                         (Sampling)
Chain 2: Iteration: 1800 / 2000 [ 90%]
                                         (Sampling)
Chain 2: Iteration: 2000 / 2000 [100%]
                                         (Sampling)
Chain 2:
Chain 2: Elapsed Time: 0.518 seconds (Warm-up)
Chain 2:
                        0.425 seconds (Sampling)
Chain 2:
                        0.943 seconds (Total)
Chain 2:
SAMPLING FOR MODEL 'count' NOW (CHAIN 3).
Chain 3:
```

Chain 3: Gradient evaluation took 5.3e-05 seconds