

COVID Project

Minutes for Thursday November 26, 2020 - 11:00 AM - 12:00 PM PDT via MS Teams

Present: Ngan Lyle (minutes), Maggie Ma, Patrick Brown

Meeting Notes

Ethics

- TCPS2:Core online course - Ngan and Patrick have completed the course, John, KT and Maggie will be doing the course in the next 2 weeks
- Ethics application will be filed at UBCO
- Whether the data can be published along side the paper depends on ethics

Spatial statistics with the new data

• Censored Poisson model

- Determine significance using credible intervals
- Results/Discussion
 - * Number of beds is associated with proportionately fewer deaths
 - * Municipal home type is associated with proportionately fewer deaths
 - * There is no spatial effect, and less variation than expected based on the SD value
- Suggestions
 - * Rerun the analysis with the subset of homes that have had an outbreak
 - * Use log(beds) as a covariate instead of beds
 - * Patrick to rerun the analysis with the new data

• Binomial model

- Results/Discussion
 - * Number of beds is associated with greater probability of an outbreak
 - * Number of inspections with orders in the last 2 years is associated with greater probability of an outbreak
 - * There is a significant spatial effect
- Suggestions
 - * Use complementary log log link function
 - <https://www.r-inla.org/faqh.rzr46apslza4>
 - `list(link = "cloglog")`
 - `control.family = list(link = "cloglog")`
 - * Use log(beds) as a covariate instead of beds

LASSO

- Use the covariance test statistic for variable selection, but what P-value should be used as the cutoff?

Paper

- Try to include the BC data
- Google Docs draft will be converted to Overleaf once finalized

Next Meeting:

- **Week of November 14th**