

Covid 19 Sources of Infection*

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06 February 2022

Abstract

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

1 Introduction

First paragraph

Second paragraph

Third paragraph

Fourth paragraph

You can and should cross-reference sections and sub-sections. For instance, Section 2. R Markdown automatically makes the sections lower case and adds a dash to spaces to generate labels, for instance, Section 5.1.

2 Data

The dataset includes the sources of infection with Covid 19 and the episode date. Because we are only concerned with known sources of infection, we have removed the cases where source of infection was either pending or had no information.

Showing sample of dataset, (Table 1).

Paragraph about Table 1

*Code and data are available at: [LINK](#).

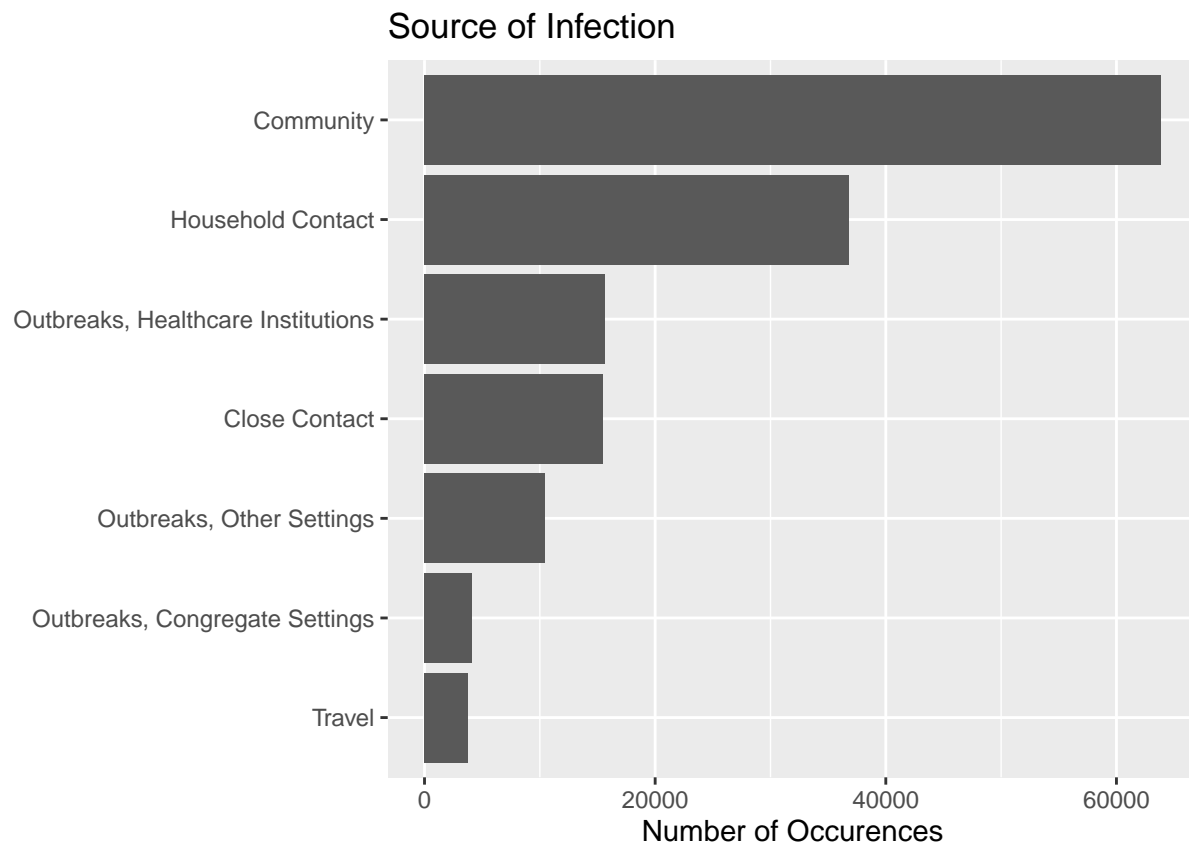
Table 1: First ten rows of a dataset on source of Covid 19 infection Ontario

Source of Infection	Episode Date
Household Contact	2020-09-16
Close Contact	2020-09-14
Close Contact	2020-09-17
Community	2020-09-19
Household Contact	2020-09-16
Travel	2020-09-13
Close Contact	2020-09-16
Household Contact	2020-09-14
Close Contact	2020-09-14
Outbreaks, Other Settings	2020-09-17

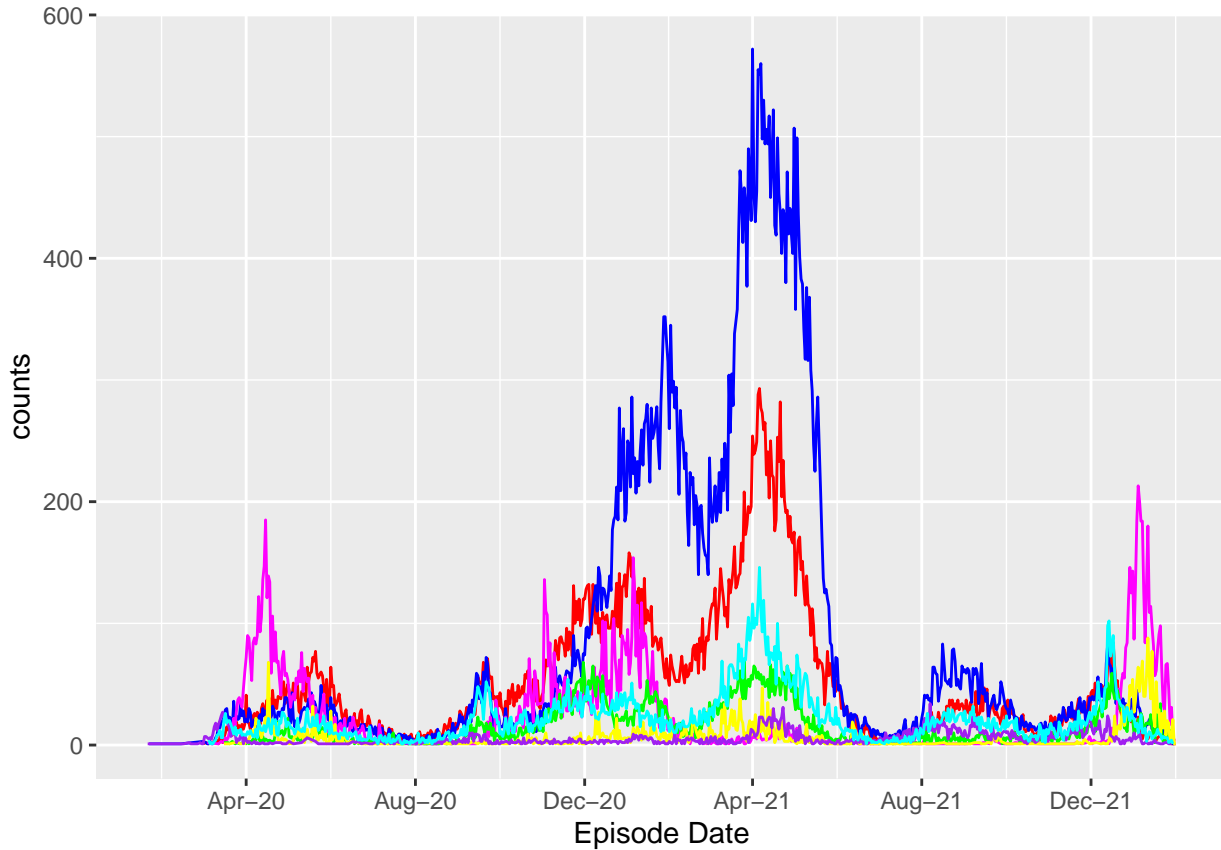
Table 2: Proportion of Sources of Infection

Source of Infection	counts	prop
Community	63829	43
Household Contact	36793	25
Close Contact	15476	10
Outbreaks, Healthcare Institutions	15660	10
Outbreaks, Other Settings	10440	7
Travel	3810	3
Outbreaks, Congregate Settings	4117	3

Here we are noting the proportions of different infection sources.



We are interested in how different sources of infection change over time during the Covid 19 pandemic. ??



Talk more about it.

Also bills and their average (Figure 1). (Notice how you can change the height and width so they don't take the whole page?)

```
## Warning: It is deprecated to specify `guide = FALSE` to remove a guide. Please
## use `guide = "none"` instead.
```

Talk way more about it.

3 Model

$$Pr(\theta|y) = \frac{Pr(y|\theta)Pr(\theta)}{Pr(y)} \quad (1)$$

Equation (1) seems useful, eh?

Here's a dumb example of how to use some references: In paper we run our analysis in **R** (R Core Team 2020). We also use the **tidyverse** which was written by Wickham et al. (2019) If we were interested in baseball data then Friendly et al. (2020) could be useful.

We can use maths by including latex between dollar signs, for instance θ .

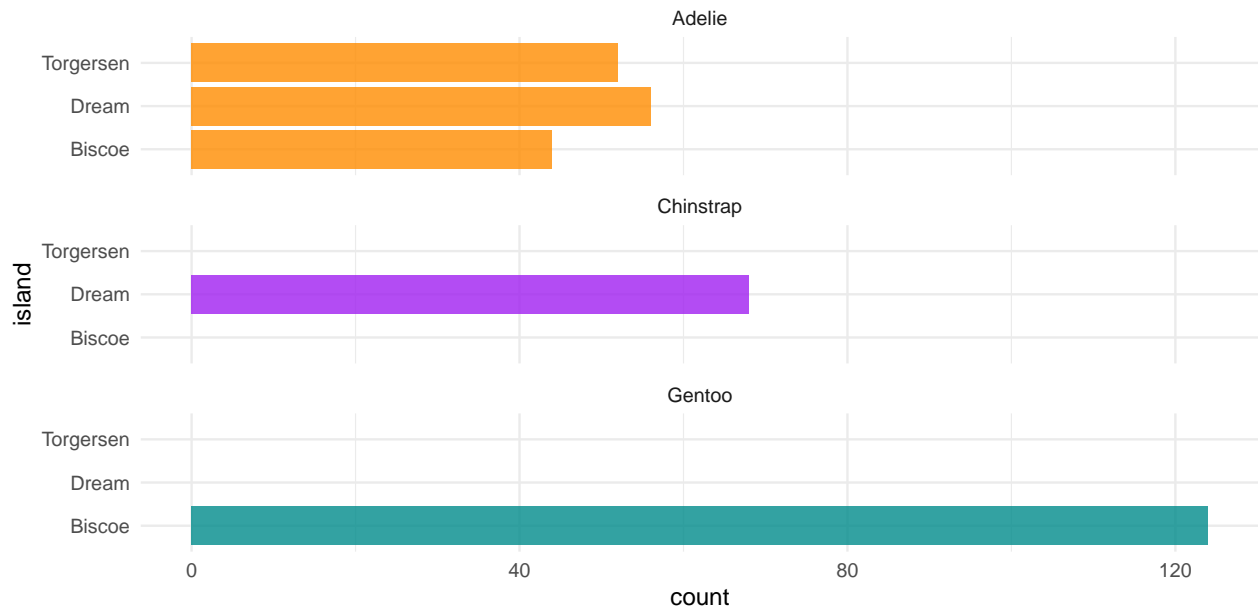


Figure 1: More bills of penguins

4 Results

5 Discussion

5.1 First discussion point

If my paper were 10 pages, then should be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

5.2 Second discussion point

5.3 Third discussion point

5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional details

References

- Friendly, Michael, Chris Dalzell, Martin Monkman, and Dennis Murphy. 2020. *Lahman: Sean ‘Lahman’ Baseball Database*. <https://CRAN.R-project.org/package=Lahman>.
- R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Golemund, et al. 2019. “Welcome to the tidyverse.” *Journal of Open Source Software* 4 (43): 1686. <https://doi.org/10.21105/joss.01686>.