

Models

```
library(tidyverse)
library(stargazer)
library(sandwich)
data <- read_rds("../data/processed/main_state_data.RDS")
```

```
## All below done in Python Now ##
#####
# Colnames: replace spaces with underscore,
# remove parantheses, metacharacters () must be enclosed in []
#colnames(data) <- gsub(" ", "_", colnames(data))
#colnames(data) <- gsub("[()]", "", colnames(data))
```

```
head(data)
```

```
data$NoFaceMaskEmploy
```

```
## [1] 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0
## [39] 0 0 0 1 1 0 0 0 0 0 0 0 0 0
```

```
lm1 <- lm(Case.Rate.per.100000.in.Last.7.Days ~ SIP, data = data)
```

```
lm2 <- lm(Case.Rate.per.100000.in.Last.7.Days ~ SIP + workplaces_2020.10.10, data = data)
```

```
lm3 <- lm(Case.Rate.per.100000.in.Last.7.Days ~ SIP + workplaces_2020.10.10 + NoFaceMask, data = data)
```

```
lm4 <- lm(Case.Rate.per.100000.in.Last.7.Days ~ SIP + workplaces_2020.10.10 + NoFaceMask + NoFaceMaskEmp
```

```
cov1 <- vcovHC(lm1, type = "HC1")
```

```
robust_se1 <- sqrt(diag(cov1))
```

```
cov2 <- vcovHC(lm2, type = "HC1")
```

```
robust_se2 <- sqrt(diag(cov2))
```

```
cov3 <- vcovHC(lm3, type = "HC1")
```

```
robust_se3 <- sqrt(diag(cov3))
```

```
cov4 <- vcovHC(lm4, type = "HC1")
```

```
robust_se4 <- sqrt(diag(cov4))
```

```
# Produce initial stargazer table
# Copy results to regression-tables.tex,
# Change covariate names, etc, then produce
# regression-tables.pdf which will knit into
# draft report
```

```
stargazer(lm1,
          lm2,
          lm3,
          lm4, se = list(robust_se1, robust_se2, robust_se3, robust_se4))
```

```
##
## % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
## % Date and time: Wed, Dec 09, 2020 - 12:17:40 PM
## \begin{table}[!htbp] \centering
##   \caption{}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lcccc}
## \hline \hline
## & \multicolumn{4}{c}{\textit{Dependent variable:}} \\
## \cline{2-5}
## \hline & \multicolumn{4}{c}{Case.Rate.per.100000.in.Last.7.Days} \\
## \hline & (1) & (2) & (3) & (4) \\
## \hline
## SIP & $-27.685^{***}$ & $-24.459^{**}$ & $-22.279^{**}$ & $-21.518^{**}$ \\
## & (10.492) & (10.595) & (9.517) & (9.604) \\
## & & & & \\
## workplaces_2020.10.10 & & 1.050^{***}$ & 0.970^{**}$ & 0.902^{**}$ \\
## & & (0.372) & (0.407) & (0.410) \\
## & & & & \\
## NoFaceMask & & & 8.965 & 6.162 \\
## & & & (6.551) & (8.267) \\
## & & & & \\
## NoFaceMaskEmploy & & & & 8.745 \\
## & & & & (14.438) \\
## & & & & \\
## Constant & 52.827^{***}$ & 72.147^{***}$ & 65.789^{***}$ & 63.678^{***}$ \\
## & (10.175) & (11.744) & (11.097) & (11.376) \\
## & & & & \\
## \hline \hline
## Observations & 51 & 51 & 51 & 51 \\
## R^2 & 0.230 & 0.290 & 0.320 & 0.329 \\
## Adjusted R^2 & 0.215 & 0.260 & 0.276 & 0.271 \\
## Residual Std. Error & 21.236 (df = 49) & 20.607 (df = 48) & 20.386 (df = 47) & 20.457 (df = 46) \\
## F Statistic & 14.662^{***}$ (df = 1; 49) & 9.804^{***}$ (df = 2; 48) & 7.360^{***}$ (df = 3; 47) & 6.840^{***}$ (df = 4; 46) \\
## \hline
## \hline \hline
## \textit{Note:} & \multicolumn{4}{r}{$^{*}$p<0.1; $^{**}$p<0.05; $^{***}$p<0.01} \\
## \end{tabular}
## \end{table}
```