# day of week effect in DHS COVID-19 case Flagging Method

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This is an extension of the analysis shown on 9/8. We aim to show that the case flag method has a meaningful day of the week effect across the whole data set.

The first table shows the mean slope of each day of the week. with Friday having a mean slope of 2 and Sunday having mean slope of -1.7 there is a huge difference between days

```
## # A tibble: 7 x 3
##   dayweek FirstConfirmed.Per100K pastwk.avg.casesperday.Per100K
##   <ord>                    <dbl>                         <dbl>
## 1 Sun                     -1.71                       -0.00879
## 2 Mon                     -1.43                        0.00970
## 3 Tue                     -1.06                       -0.0309
## 4 Wed                      0.0497                      -0.0234
## 5 Thu                      1.33                        0.0730
## 6 Fri                      2.00                        0.113
## 7 Sat                      0.532                       0.0446
```

The second table has the percent each weekday as a flag. having a 3x difference is large enough to have concern that this could be affecting the flagging method

```
## # A tibble: 7 x 3
##   dayweek FirstConfirmed.Per100K pastwk.avg.casesperday.Per100K
##   <ord>                    <dbl>                         <dbl>
## 1 Sun                       6.79                          6.10
## 2 Mon                       6.55                          4.87
## 3 Tue                       7.21                          4.22
## 4 Wed                      10.0                           4.37
## 5 Thu                      14.9                           4.61
## 6 Fri                      17.2                           5.29
## 7 Sat                      12.1                           6.20
```