Exploratory Data Analysis of COVID-19 Cases 23 March 2020

Jessica Randall

Loading data

Here I load in data from the projects from which I have collected and cleaned data:

Our World in Data's ECDC data New York Times data

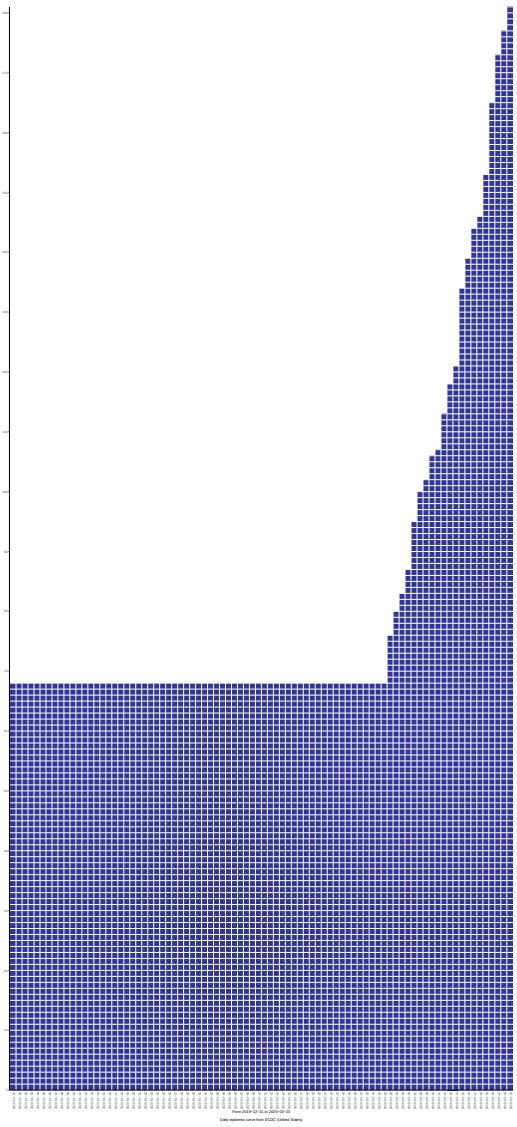
Cases by source

Cases reported by ECDC

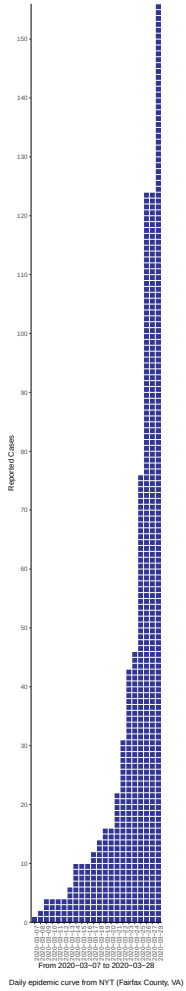
```
us_inc <- ecdc_cases %>%
  filter(loc == "United States")

EpiCurve(us_inc,
date = "date_rec",
period = "day",
color = "#313695",
xlabel=sprintf("From %s to %s", min(us_inc$date_rec), max(us_inc$date_rec)),
note = "Daily epidemic curve from ECDC (United States)")
```

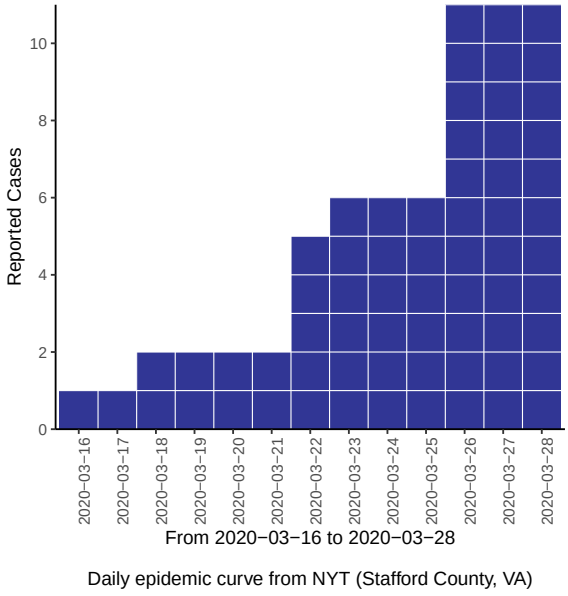
```
## Warning: `data_frame()` is deprecated as of tibble 1.1.0.
## Please use `tibble()` instead.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_warnings()` to see where this warning was generated.
```



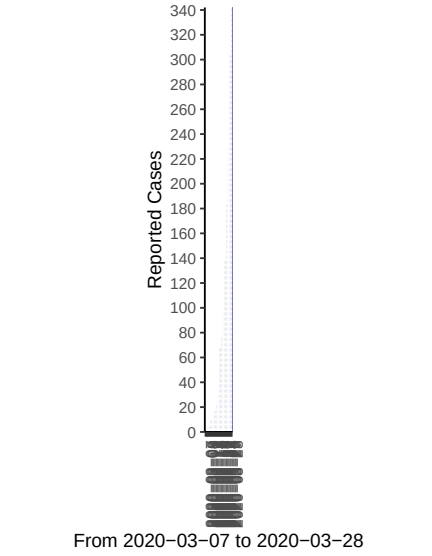
Cases reported by NYT in Fairfax County



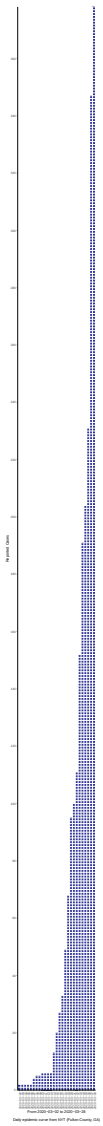
Cases reported by NYT in Stafford County



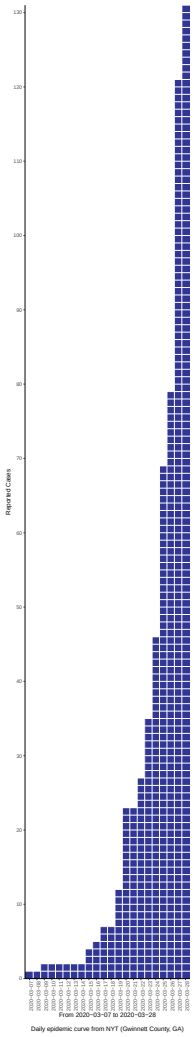
Cases reported by NYT in Washington DC



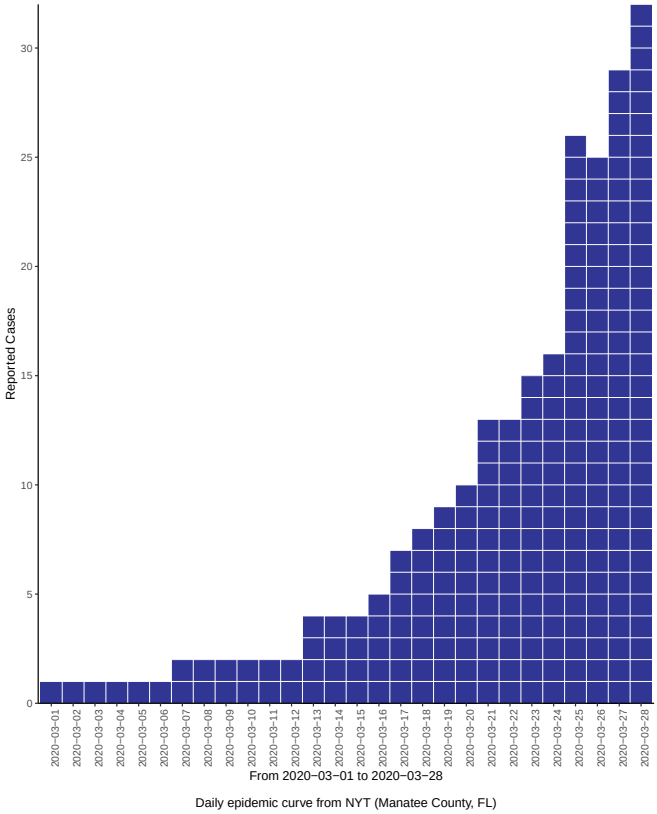
Cases reported by NYT in Fulton County



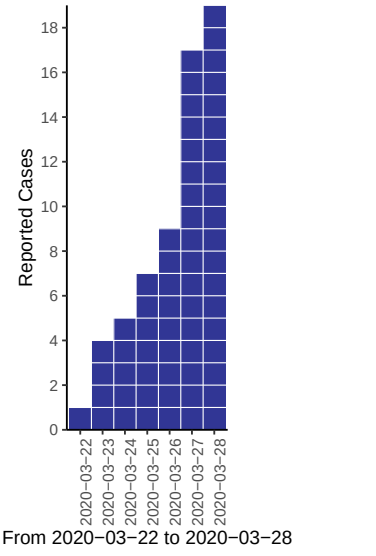
Cases reported by NYT in Gwinnett County



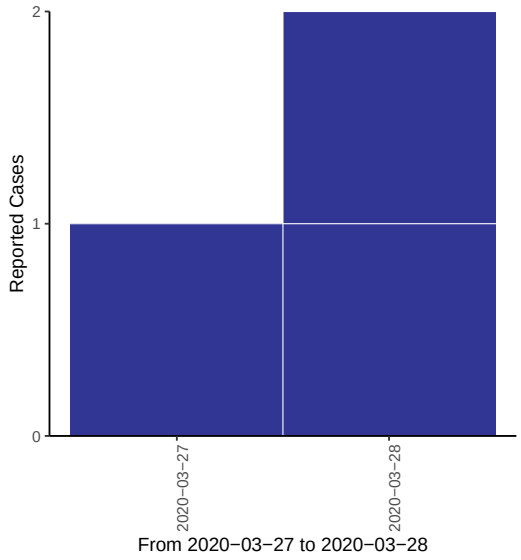
Cases reported by NYT in Manatee County



Cases reported by NYT in Madison County

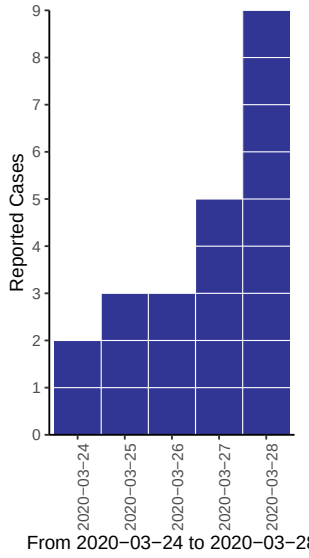


Cases reported by NYT in Taylor County



Daily epidemic curve from NYT (Taylor County, TX)

Cases reported by NYT in Randolph County



Daily epidemic curve from NYT (Randolph County, NC)

Session information and References {-}

```
## [1] "Mon Mar 30 18:30:04 2020"
```

```
## R version 3.6.3 (2020-02-29)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Debian GNU/Linux 9 (stretch)
##
## Matrix products: default
## BLAS:   /usr/lib/openblas-base/libblas.so.3
## LAPACK: /usr/lib/libopenblasp-r0.2.19.so
##
```

```
## locale:
##  [1] LC_CTYPE=en_US.UTF-8       LC_NUMERIC=C
##  [3] LC_TIME=en_US.UTF-8        LC_COLLATE=en_US.UTF-8
##  [5] LC_MONETARY=en_US.UTF-8    LC_MESSAGES=en_US.UTF-8
##  [7] LC_PAPER=en_US.UTF-8       LC_NAME=C
##  [9] LC_ADDRESS=C               LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
##  [1] RColorBrewer_1.1-2 EpiCurve_2.2-1     timeDate_3043.102  scales_1.1.0
##  [5] ISOweek_0.6-2      assertr_2.7        here_0.1           knitr_1.28
##  [9] forcats_0.5.0      stringr_1.4.0      dplyr_0.8.5        purrr_0.3.3
## [13] readr_1.3.1        tidyr_1.0.2        tibble_3.0.0       ggplot2_3.3.0
## [17] tidyverse_1.3.0
##
## loaded via a namespace (and not attached):
##  [1] Rcpp_1.0.4       lubridate_1.7.4  lattice_0.20-40  assertthat_0.2.1
##  [5] rprojroot_1.3-2  digest_0.6.25    R6_2.4.1         cellranger_1.1.0
##  [9] backports_1.1.5  reprex_0.3.0     evaluate_0.14    httr_1.4.1
## [13] pillar_1.4.3     rlang_0.4.5      readxl_1.3.1     rstudioapi_0.11
## [17] rmarkdown_2.1    munsell_0.5.0    broom_0.5.5      compiler_3.6.3
## [21] modelr_0.1.6     xfun_0.12        pkgconfig_2.0.3  htmltools_0.4.0
## [25] tidyselect_1.0.0 bookdown_0.18    fansi_0.4.1      crayon_1.3.4
## [29] dbplyr_1.4.2     withr_2.1.2      grid_3.6.3       nlme_3.1-145
## [33] jsonlite_1.6.1   gtable_0.3.0     lifecycle_0.2.0  DBI_1.1.0
## [37] pacman_0.5.1     magrittr_1.5     cli_2.0.2        stringi_1.4.6
## [41] farver_2.0.3     fs_1.3.2         xml2_1.2.5       ellipsis_0.3.0
## [45] generics_0.0.2   vctrs_0.2.4      tools_3.6.3      glue_1.3.2
## [49] hms_0.5.3        yaml_2.2.1       colorspace_1.4-1 rvest_0.3.5
## [53] haven_2.2.0
```