Code last run 2021-02-11.
Daily: Data as of January 29, 2021.
Neighbourhood: Data as of January 28, 2021.

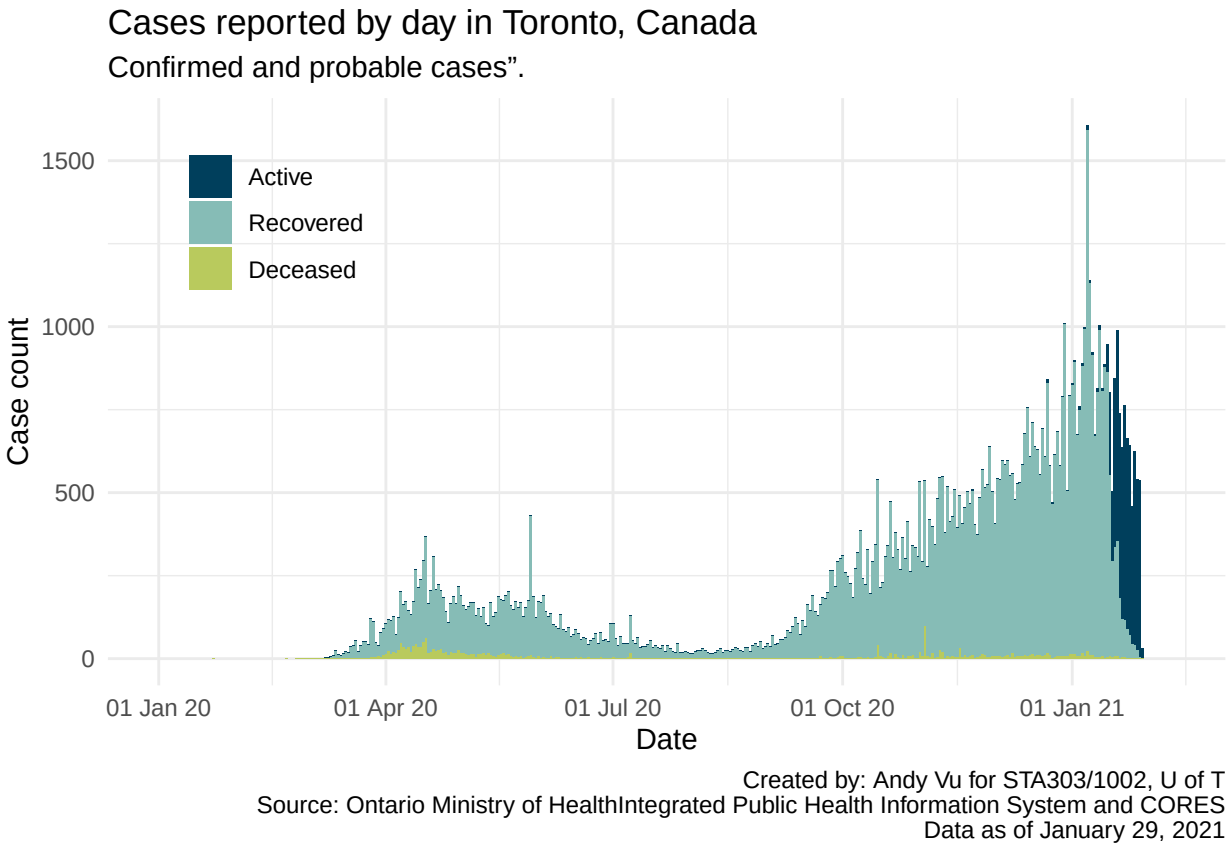
Task 1: Daily cases

Data wrangling

```
reported <- reported_raw %>%
  mutate_if(is.numeric, replace_na, replace = 0) %>%
  mutate(reported_date = date(reported_date)) %>%
  rename(Active = active, Recovered = recovered, Deceased = deceased) %>%
  pivot_longer(-c(reported_date), names_to = "status", values_to = "case_count") %>%
  mutate(status = fct_relevel(status, "Recovered", after = 1))
```

Data visualization

```
reported %>%
  ggplot(aes(x = reported_date, y = case_count, fill = status)) +
  geom_bar(stat = "identity") +
  scale_x_date(labels = scales::date_format("%d %b %y"),
               limits = c(date("2020-01-01"), Sys.Date())) +
  theme_minimal() +
  labs(title = "Cases reported by day in Toronto, Canada",
       subtitle = "Confirmed and probable cases".",
       x = "Date",
       y = "Case count",
       caption = str_c("Created by: Andy Vu for STA303/1002, U of T\n",
                       "Source: Ontario Ministry of Health",
                       "Integrated Public Health Information System and CORES\n",
                       date_daily[1,1])) +
  theme(legend.title = element_blank(), legend.position = c(0.15, 0.8)) +
  scale_fill_manual(values = c("#003F5C", "#86BCB6", "#B9CA5D"))
```



Task 2: Outbreak type

Data wrangling

Data visualization

Task 3: Neighbourhoods

Data wrangling: part 1

Data wrangling: part 2

Data wrangling: part 3

Data visualization

```
# This chunk of code helps you prepare your assessment for submission on Crowdmark
# This is optional. If it isn't working, you can do it manually/take another approach.

# Run this chunk by hand after knitting your final version of your pdf for submission.
# A new file called 'to_submit' will appear in your working directory with each page of your assignment

# Install the required packages
if(!match("staplr", installed.packages()[,1], nomatch = FALSE))
  {install.packages("staplr")}

# Don't edit anything in this function
prep_for_crowdmark <- function(pdf=NULL){
  # Get the name of the file you're currently in.
  this_file <- rstudioapi::getSourceEditorContext()$path
  pdf_name <- sub(".Rmd", ".pdf", sub('.*/', '', this_file))

  # Create a file called to_submit to put the individual files in
  # This will be in the same folder as this file is saved
  if(!match("to_submit", list.files(), nomatch = FALSE))
    {dir.create("to_submit")}

  # Split the files
  if(is.null(pdf)){
  staplr::split_pdf(pdf_name, output_directory = "to_submit", prefix = "page_")} else {
    staplr::split_pdf(pdf, output_directory = "to_submit", prefix = "page_")
  }
}

prep_for_crowdmark()
```