

First presentation of my data set

Callum Coode

Effect of social distancing on cases of flu

I wanted to find something related to Covid-19 but looking at something positive. I found data from *WHO on cases of influenza* as a lot of people are saying that they haven't got flu or colds this year due to social distancing. I have processed the data to just look at the total cases of all types of flu on a weekly basis.

```
df <- read.csv(here("data", "rawfludata.csv"))

df <- df %>%
  rename(year = Year, week = Week, start = Start.date, end = End.date,
         cases = Total.number.of.influenza.positive.viruses)

df <- df %>%
  select(year, week, start, end, cases)

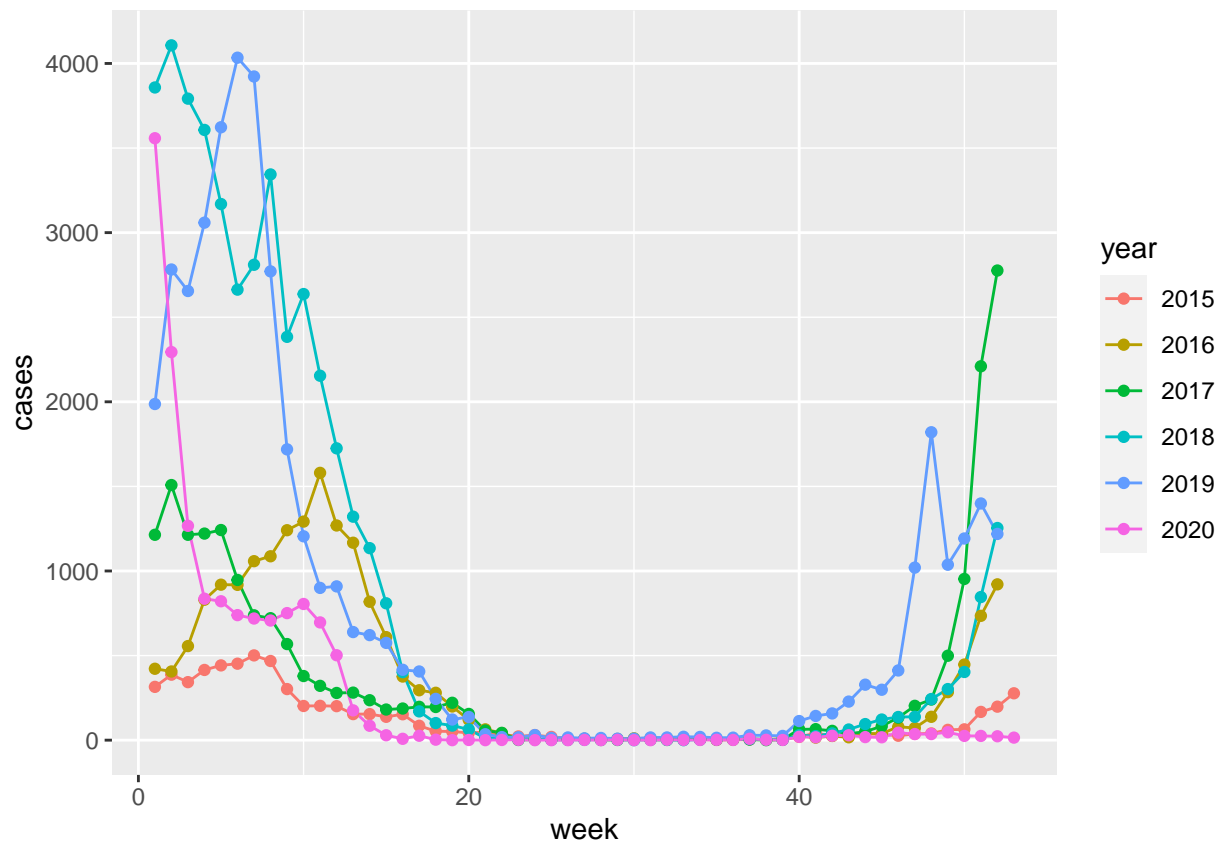
head(df, 10)
```

##	year	week	start	end	cases
## 1	2015	1	2014-12-29	2015-01-04	315
## 2	2015	2	2015-01-05	2015-01-11	387
## 3	2015	3	2015-01-12	2015-01-18	343
## 4	2015	4	2015-01-19	2015-01-25	415
## 5	2015	5	2015-01-26	2015-02-01	442
## 6	2015	6	2015-02-02	2015-02-08	452
## 7	2015	7	2015-02-09	2015-02-15	501
## 8	2015	8	2015-02-16	2015-02-22	468
## 9	2015	9	2015-02-23	2015-03-01	302
## 10	2015	10	2015-03-02	2015-03-08	202

From initially looking at the data, it does look like the cases in 2020/2021 are a lot lower. For example, the mean number of cases in 2020 is 272.17, whereas in 2019 the mean is 816.29.

```
df$year <- as.character(df$year)

p1 <- ggplot(df, aes(x = week, y = cases, group = year, colour = year))
p1 + geom_line() + geom_point()
```



Since cases are usually a lot higher in the winter and lockdown started on 23rd March (week 13), I may display this data from week 13 to week 13 to better show the impact of social distancing on cases. I may also include bar graphs showing highest or total cases for each of these periods.

Please note this does not include data from 2021. There is currently no data for the most recent 2 weeks of 2021, but this will be added as soon as this becomes available, hopefully in the next few weeks.