Health Mapping

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Mapping New Zealand Health Data

Lets take some health data from the Ministry of Health Shiny App. tidy it up and plot it onto a Regional Map of New Zealand. The health website is it's own shiny app and we could do a lot of things there, but comparisons aren't so easy.

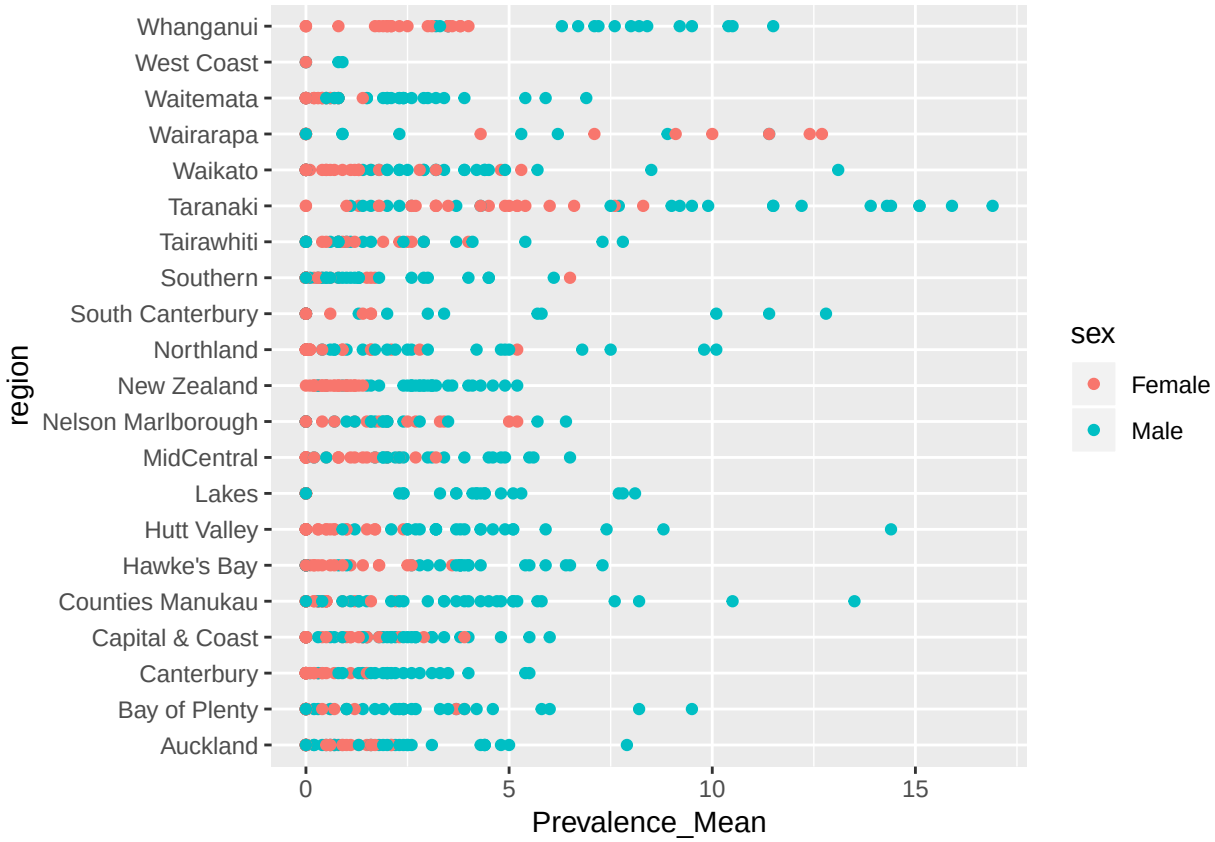
```
hdat <- read_csv(file="data/nz-health-survey-2016-17-regional-update-dhb-prevalences.zip")
```

```
## Parsed with column specification:
## cols(
##   population = col_character(),
##   short.description = col_character(),
##   region = col_character(),
##   type = col_character(),
##   year = col_character(),
##   agegroup = col_character(),
##   sex = col_character(),
##   Ethnicity = col_character(),
##   nzdep_quin = col_character(),
##   Prevalence_Mean = col_double(),
##   Prevalence_Mean.SE = col_double(),
##   CI.Lower.Bound = col_double(),
##   CI.Upper.Bound = col_double(),
##   estimated.number = col_double(),
##   effective.sample.size = col_double()
## )
```

This is a reasonable chunk of data, 466245 lines with 15 columns with these headers ***population, short.description, region, type, year, agegroup, sex, Ethnicity, nzdep_quin, Prevalence_Mean, Prevalence_Mean.SE, CI.Lower.Bound, CI.Upper.Bound, estimated.number, effective.sample.size***

lets make a super simple plot with something in the data

```
newdat <- hdat %>% filter(.,short.description=="ADHD", type=="STD",sex!="All")
ggplot(newdat, aes(Prevalence_Mean,region,col=sex)) + geom_point()
```


region
Whanganui
West Coast
Waitemata
Wairarapa
Waikato
Taranaki
Tairawhiti
Southern
South Canterbury
Northland
New Zealand
Nelson Marlborough
MidCentral
Lakes
Hutt Valley
Hawke's Bay
Counties Manukau
Capital & Coast
Canterbury
Bay of Plenty
Auckland
0
5
10
15
Prevalence_Mean
sex
Female
Male