

Mappeoppgave 2

```
library(rjson)
```

```
## Warning: package 'rjson' was built under R version 4.1.2
```

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.5      v purrr  0.3.4
## v tibble  3.1.6      v dplyr  1.0.7
## v tidyr   1.1.4      v stringr 1.4.0
## v readr   2.1.1      v forcats 0.5.1
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
library(ggplot2)
library(ggrepel)
```

```
## Laster inn nødvendig data med linken under.
```

```
df <- "https://static01.nyt.com/newsgraphics/2021/12/20/us-coronavirus-deaths-2021/ff0adde21623e111d8ce103fedecf7ffc7906264/scatter.json"
df <- fromJSON(paste(readLines(df), collapse=""))
```

```
## Warning in readLines(df): incomplete final line found on 'https://
## static01.nyt.com/newsgraphics/2021/12/20/us-coronavirus-deaths-2021/
## ff0adde21623e111d8ce103fedecf7ffc7906264/scatter.json'
```

```
df <- do.call(rbind.data.frame, df)
```

```
## OPPGAVE 1
```

```
## lager plot
```

```
p1 <- ggplot(df, aes( x = fully_vaccinated_pct_of_pop, y = deaths_per_100k)) +
  geom_point(col = "darkcyan" , size = 4, alpha = 0.3) +
  geom_label_repel(aes(label = name), size = 3) +
  scale_x_continuous(labels=scales::percent,
                     breaks = seq(from = 0, to = 1, by = 0.05)) +
  labs(title = "Covid-19 deaths since universal adult vaccine eligilbity copmared with \n vaccination",
       x = "Share of total population fully vaccinated" ,
```

```

y = "20 avg. monthly deaths per 100,000") +
geom_text(aes(label="Lower vaccination rate, \n higher death rate", x=0.58,y=17))+
geom_text(aes(label="Higher vaccination rate, \n lower death rate", x=0.71,y=10)) +
geom_segment(aes(x = 0.56, y = 17, xend = 0.525 , yend = 18),
             arrow = arrow(length = unit(0.5, "cm")))) +
geom_segment(aes(x = 0.725, y = 8, xend = 0.74 , yend = 6.5),
             arrow = arrow(length = unit(0.5, "cm")))) +
theme_bw()

```

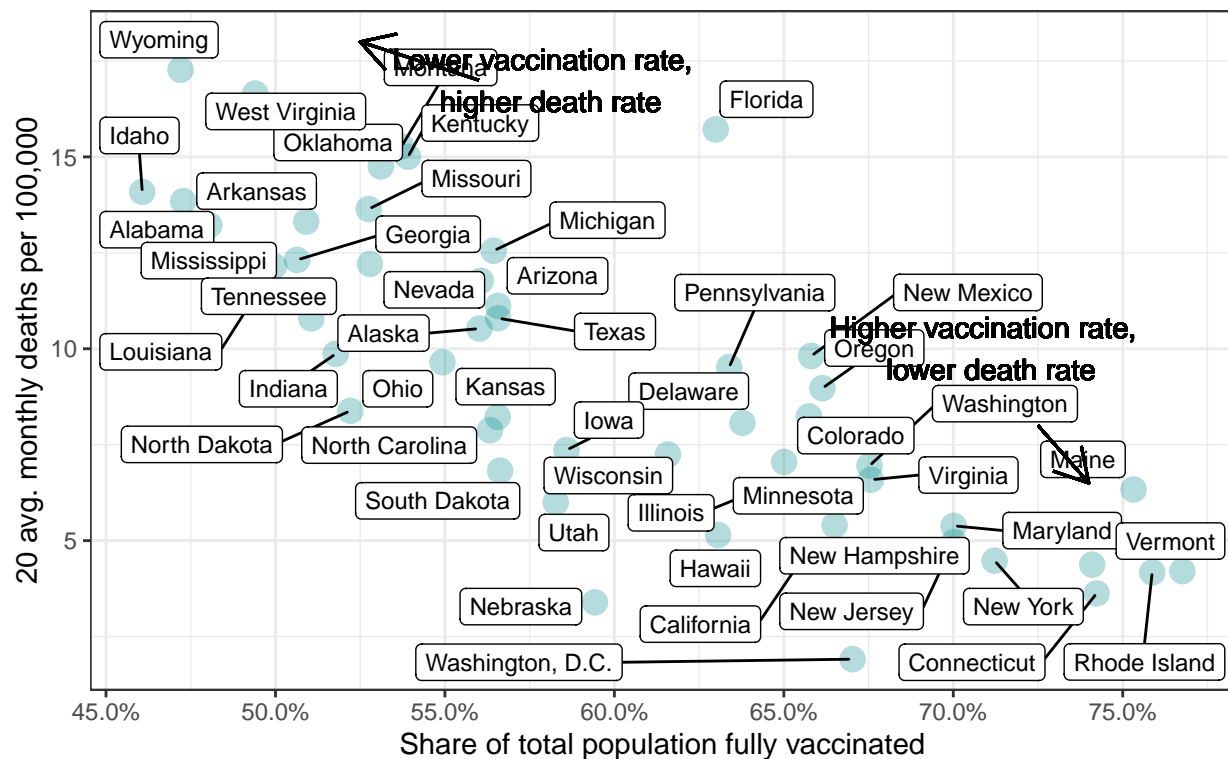
p1

```

## Warning: ggrepel: 2 unlabeled data points (too many overlaps). Consider
## increasing max.overlaps

```

Covid-19 deaths since universal adult vaccine eligilbity copmared with vaccination rates



OPPGAVE 2

```
lm(deaths_per_100k ~ fully_vaccinated_pct_of_pop, data = df)
```

```
##
```

```
## Call:
```

```
## lm(formula = deaths_per_100k ~ fully_vaccinated_pct_of_pop, data = df)
```

```
##
```

```
## Coefficients:
```

```
##              (Intercept)  fully_vaccinated_pct_of_pop
##                   31.15                   -36.66

```

```
## y-verdien viser 31.15, mens x-verdien er fallende og viser -36.66. Geom_smooth funksjonen brukes ti
```

```
p1 + geom_smooth(method = lm, se = FALSE)
```

```
## 'geom_smooth()' using formula 'y ~ x'
```

```
## Warning: ggrepel: 2 unlabeled data points (too many overlaps). Consider
## increasing max.overlaps
```

Covid-19 deaths since universal adult vaccine eligilbility copmared with vaccination rates

