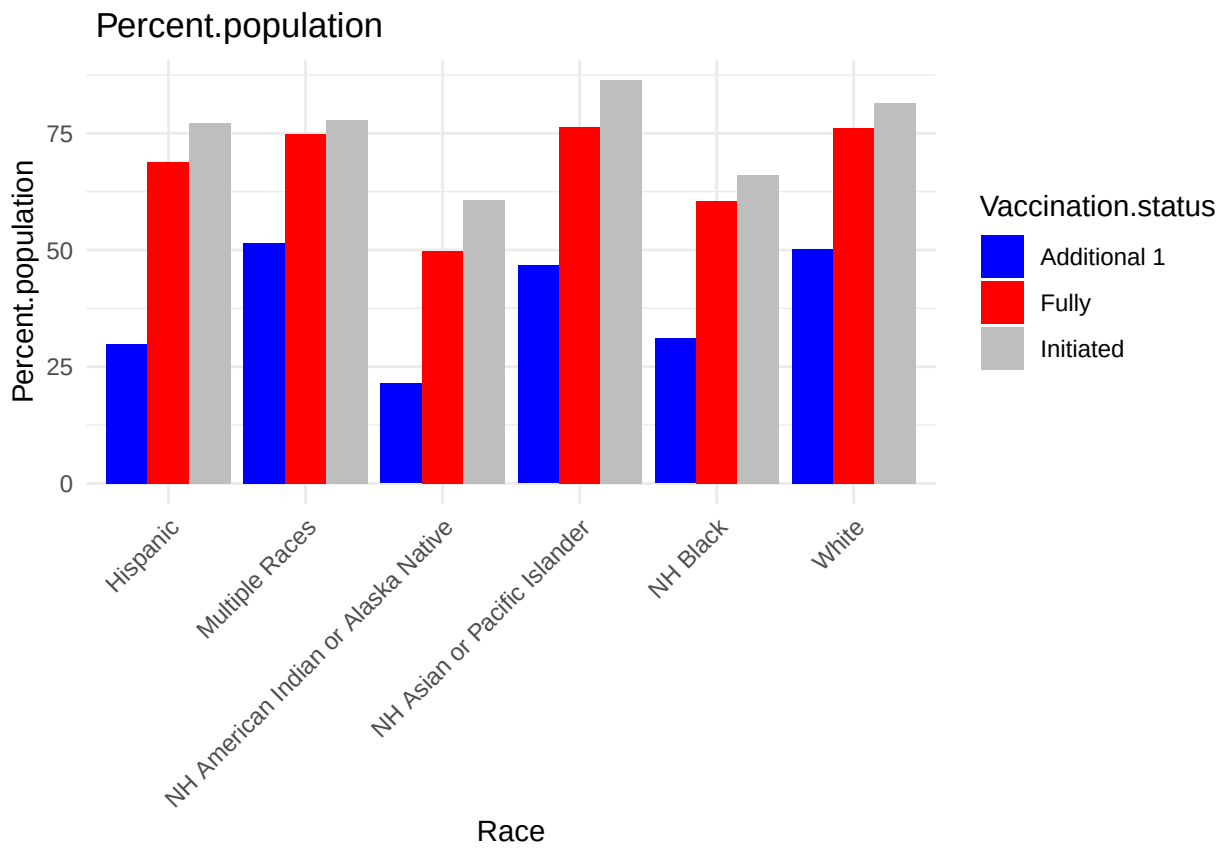
Dara Visulization_by_Race_Ethnicity_and_Age

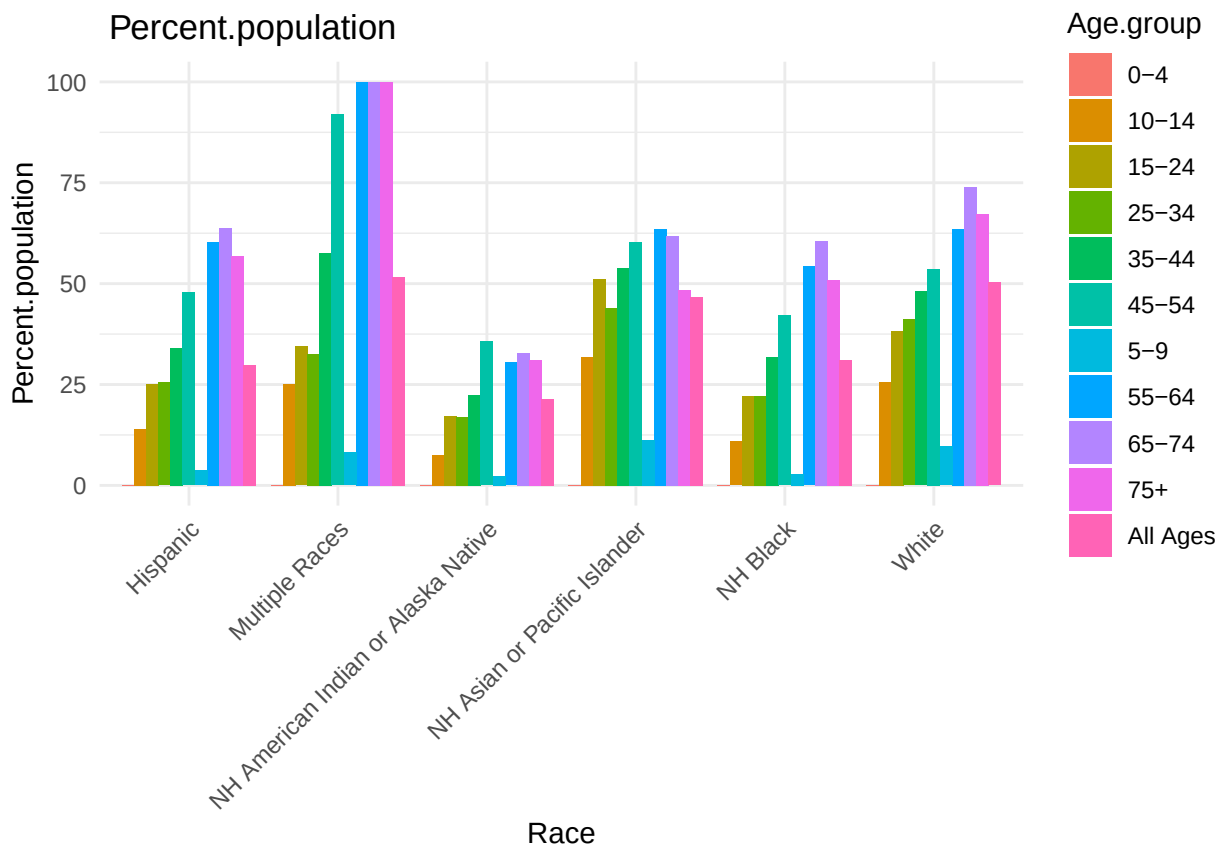
```
setwd("/Users/jiataizhang/Desktop")
vac_data <- read.csv("COVID-19_Vaccinations_by_Race_Ethnicity_and_Age_-_ARCHIVED.csv")
df <- na.omit(vac_data)
head(df)
```

```
##   Race.ethnicity Age.group Vaccination.status Count Population
## 1       Hispanic       0-4       Additional 1    12      52476
## 2       Hispanic       0-4              Fully  1879      52476
## 3       Hispanic       0-4          Initiated  3911      52476
## 4       Hispanic     10-14       Additional 1  7785      55874
## 5       Hispanic     10-14              Fully 33391      55874
## 6       Hispanic     10-14          Initiated 37542      55874
##   Percent.population Date.updated
## 1               0.02   02/08/2023
## 2               3.58   02/08/2023
## 3               7.45   02/08/2023
## 4              13.93   02/08/2023
## 5              59.76   02/08/2023
## 6              67.19   02/08/2023
```

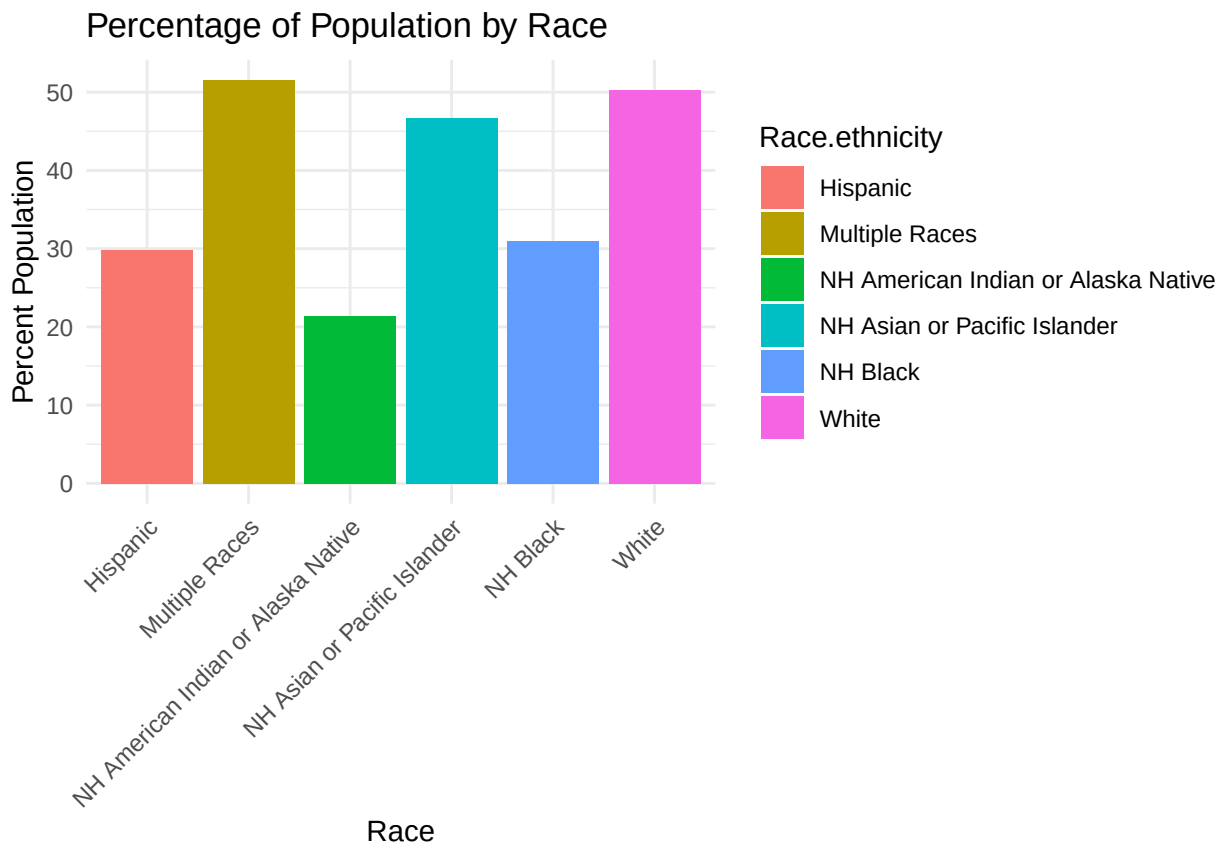
```
library(ggplot2)
data2 <- df[df$Age.group == "All Ages" &df$Date.updated == "02/08/2023", ]
ggplot(data = data2, aes(x = Race.ethnicity, y = Percent.population, fill = Vaccination.status)) +
  geom_col(position = "dodge") +
  labs(title = " Percent.population",
       x = "Race",
       y = "Percent.population",
       fill = "Vaccination.status") +
  scale_fill_manual(values = c("Additional 1" = "blue", "Initiated" = "gray", "Fully"="red")) +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```



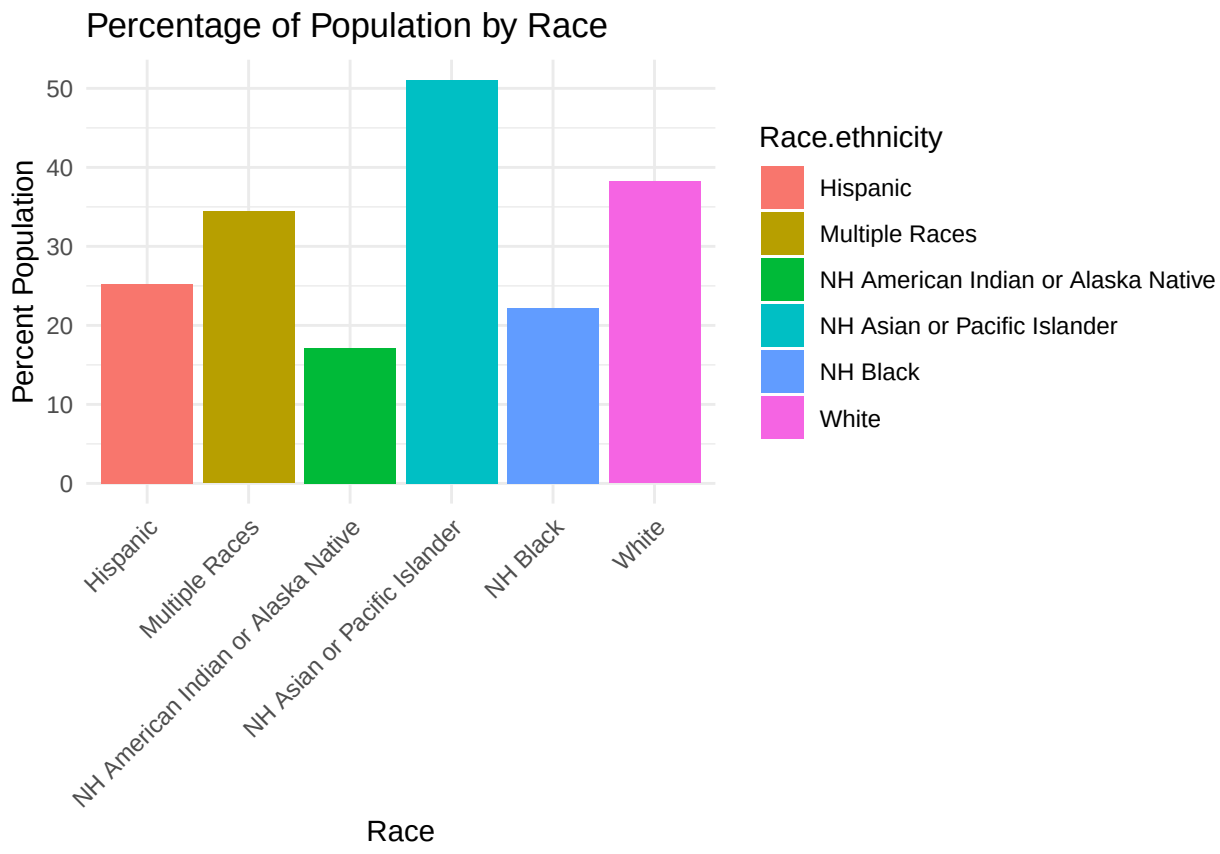

```
additional1_data <- df[df$Vaccination.status == "Additional 1"  &df$Date.updated == "02/08/2023", ]
library(ggplot2)

ggplot(data = additional1_data, aes(x = Race.ethnicity, y = Percent.population, fill = Age.group)) +
  geom_col(position = "dodge") +
  labs(title = " Percent.population",
       x = "Race",
       y = "Percent.population",
       fill = "Age.group")  +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```



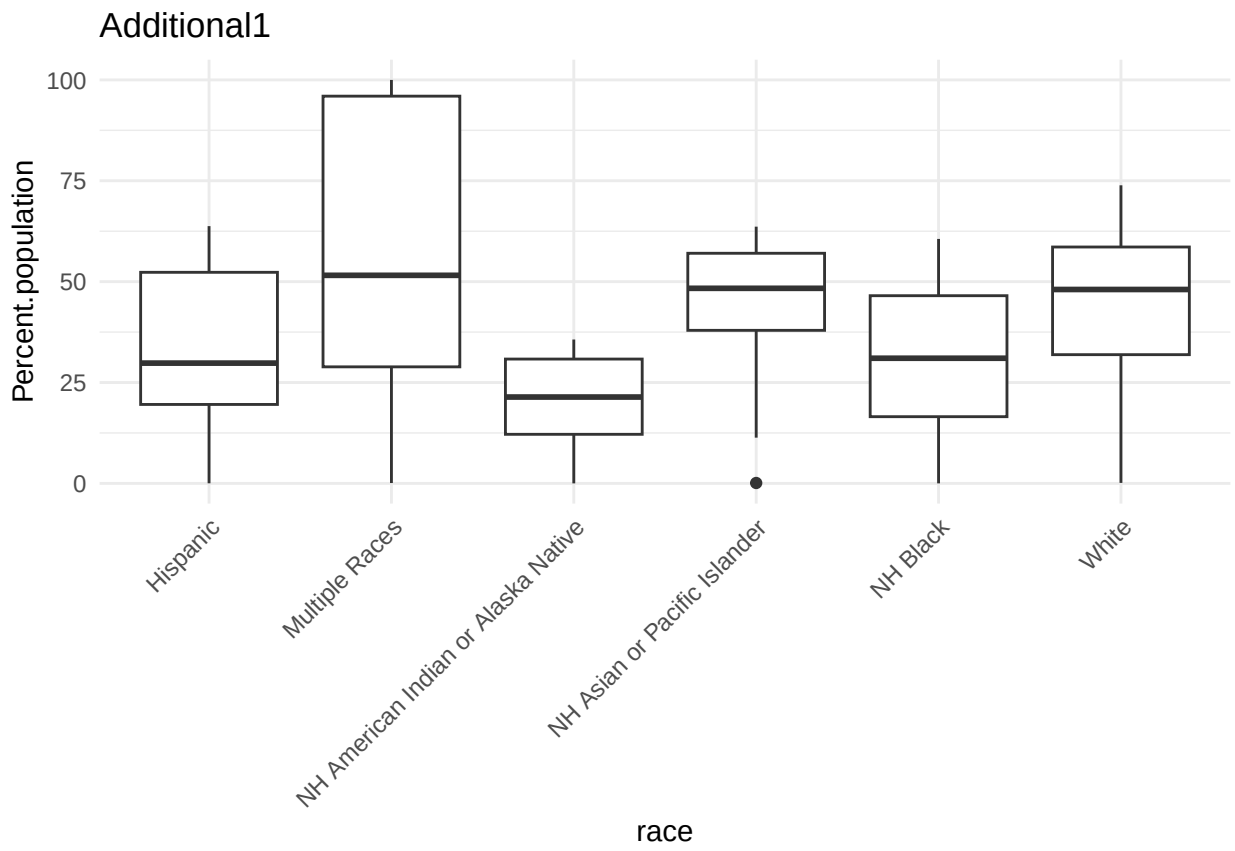

```
additional1_data_age <- df[df$Vaccination.status == "Additional 1" & df$Age.group == "All Ages" &df$Dat
library(ggplot2)
ggplot(additional1_data_age, aes(x = Race.ethnicity, y = Percent.population, fill = Race.ethnicity)) +
  geom_bar(stat = "identity", position = "dodge") +
  labs(title = "Percentage of Population by Race",
       x = "Race",
       y = "Percent Population") +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```



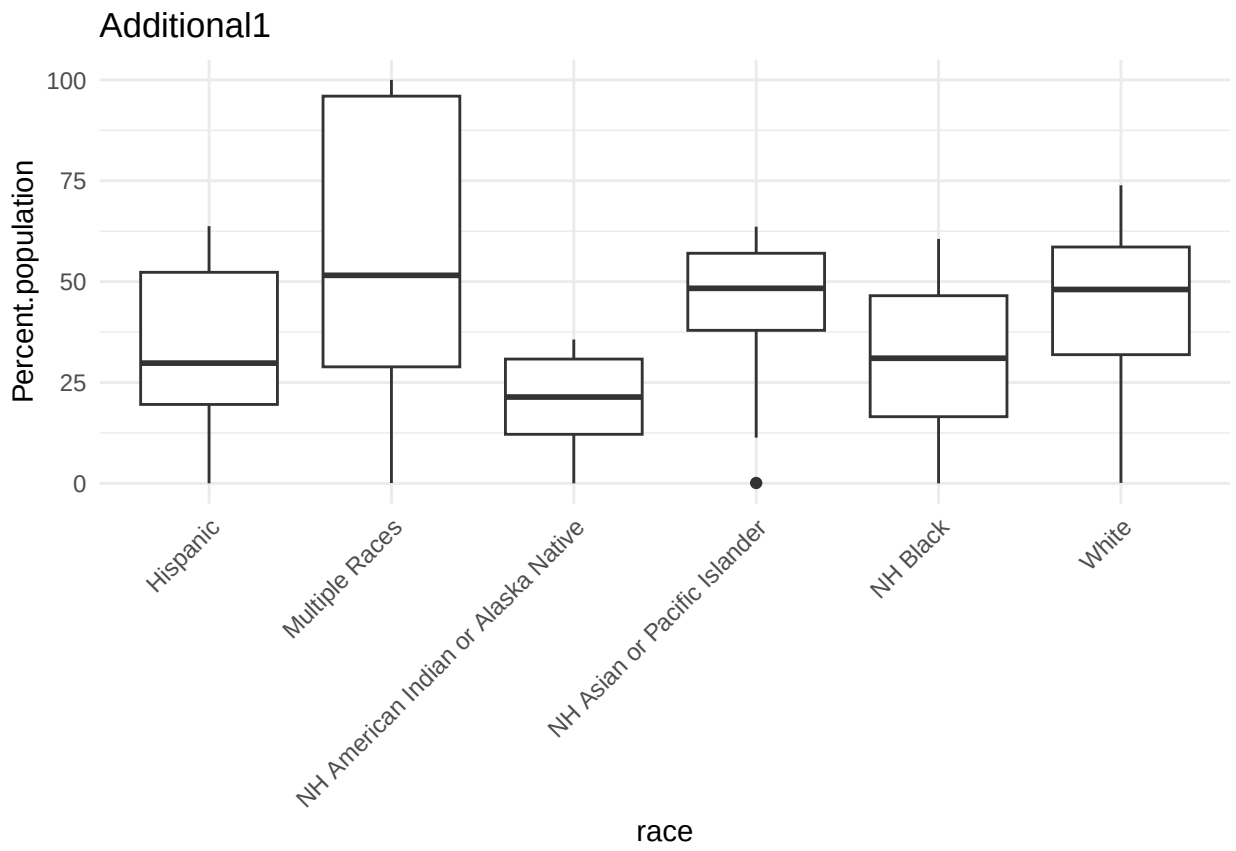

```
additional1_data_age_15_24 <- df[df$Vaccination.status == "Additional 1" & df$Age.group == "15-24" &df$
library(ggplot2)
ggplot(additional1_data_age_15_24, aes(x = Race.ethnicity, y = Percent.population, fill = Race.ethnicity
  geom_bar(stat = "identity", position = "dodge") +
  labs(title = "Percentage of Population by Race",
       x = "Race",
       y = "Percent Population") +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```




```r
cross_table <- table(additional1_data_age$Race.ethnicity, additional1_data_age$Percent.population)

library(ggplot2)

ggplot(additional1_data, aes(x = Race.ethnicity, y = Percent.population)) +
  geom_boxplot() +
  labs(title = "Additional1", x = "race", y = "Percent.population") +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```




```
cross_table <- table(additional1_data_age_15_24$Race.ethnicity, additional1_data_age_15_24$Percent.popul

library(ggplot2)

ggplot(additional1_data, aes(x = Race.ethnicity, y = Percent.population)) +
  geom_boxplot() +
  labs(title = "Additional1", x = "race", y = "Percent.population") +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```


Additional1
Percent.population
100
75
50
25
0
Hispanic
Multiple Races
NH American Indian or Alaska Native
NH Asian or Pacific Islander
NH Black
White
race