# Final Project

## Plot A:

Explore trends of infections by month by using a linked scatter plot.

1. Keys: Date 2. Values: Number of COVID cases 3. Color scheme: Tooltip has dark gray background for easy readability. 4. Marks: Points, Lines 5. Channels: Positions

All 2020 2021 2022

28078

# of COVID-19 Cases by Date
# of COVID-19 Cases
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
02-2020
03-2020
04-2020
05-2020
06-2020
07-2020
08-2020
09-2020
10-2020
11-2020
12-2020
01-2021
02-2021
03-2021
04-2021
05-2021
06-2021
07-2021
08-2021
09-2021
10-2021
11-2021
12-2021
01-2022
02-2022
Date

## Plot B:

Explore relationship between age and weeks until tested positive by using a scatter plot.

1. Keys: Age, Weeks Until Tested Positive 2. Values: N/A 3. Color scheme: N/A 4. Marks: Points 5. Channels: Positions

Age vs Weeks Until Tested Positive
Weeks Until Tested Positive
0
10
20
30
40
50
60
70
80
90
0
10
20
30
40
50
60
70
80
Age

## Plot C:

Explore difference of covid deaths for symptomatic and asymptomatic by gender using a stacked bar chart.

1. Keys: gender(male and female), symptom(symptomatic and asymptomatic) 2. Values: number of deaths 3. Color scheme: We choose the sequential colormap, the Symptomatic to be darker and Asymptomatic to be lighter. 4. Marks: lines and areas 5. Channels: size, position, and color

## Plot D:

Show distribution of total number of deaths and hospitalized in each month by using boxplot.

1. Keys: status(death and hospitalize) 2. Values: the total number of death or hospitalized in each month 3. Color scheme: We choose the hue, the dead use red and hospitalized use orange. 4. Marks: lines and areas 5. Channels: size, position, and color

## Plot E:

Show variation of total number of hospitalized for two genders by using streamgraph.

1. Keys: date, gender(male and female) 2. Values: number of hospitalized 3. Color scheme: We choose the hue. We directly represent the male and female with purple and pink. It will be easy to distinguish the two sexs. 4. Marks: areas 5. Channels: size, position, and color

Number of Hospitalized By Gender
Male
Female
# of Hospitalized
8,000
6,000
4,000
2,000
0
−2,000
−4,000
−6,000
−8,000
2020-02
2020-03
2020-04
2020-05
2020-06
2020-07
2020-08
2020-09
2020-10
2020-11
2020-12
2021-01
2021-02
2021-03
2021-04
2021-05
2021-06
2021-07
2021-08
2021-09
2021-10
2021-11
2021-12
2022-01
2022-02
Month