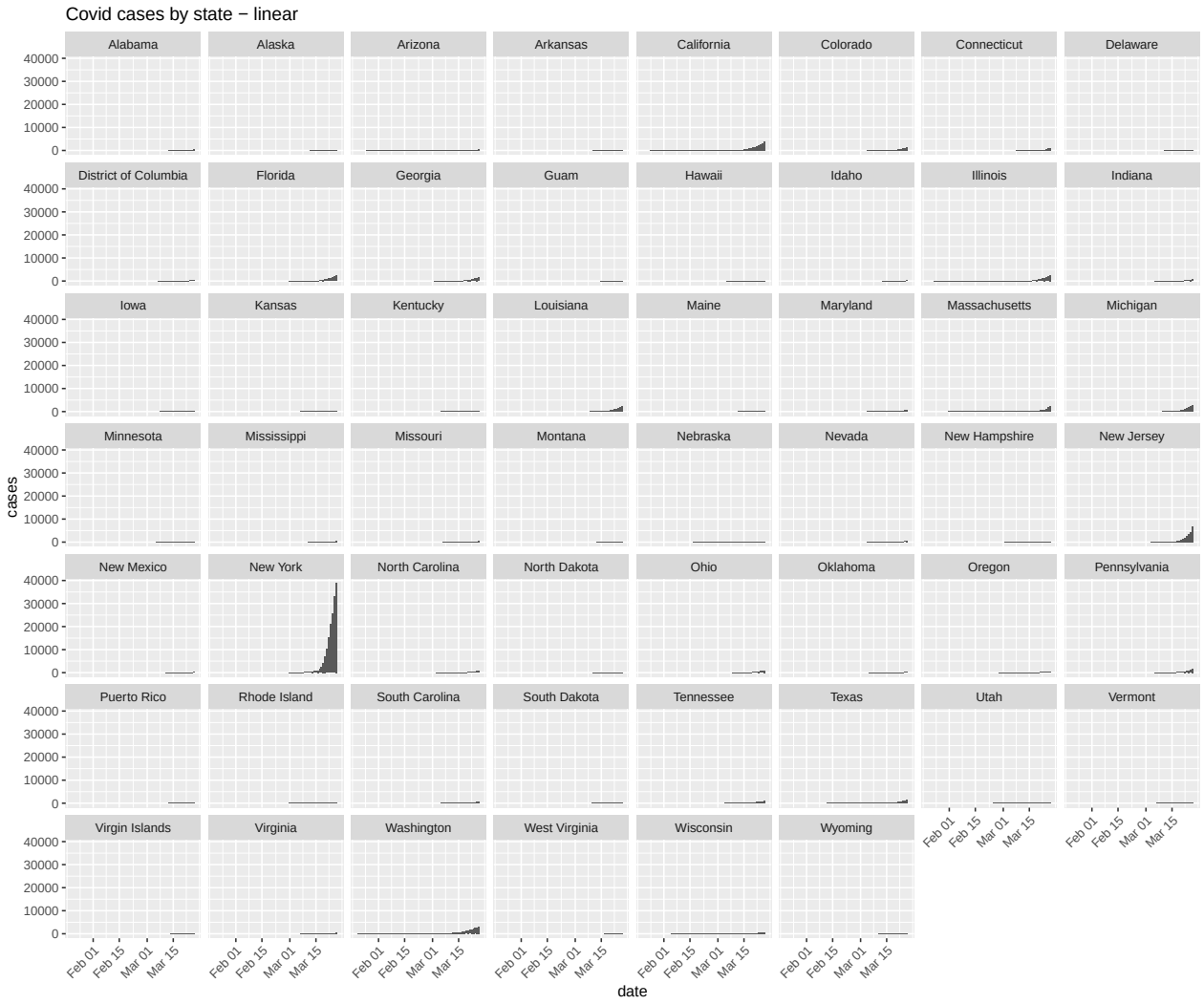
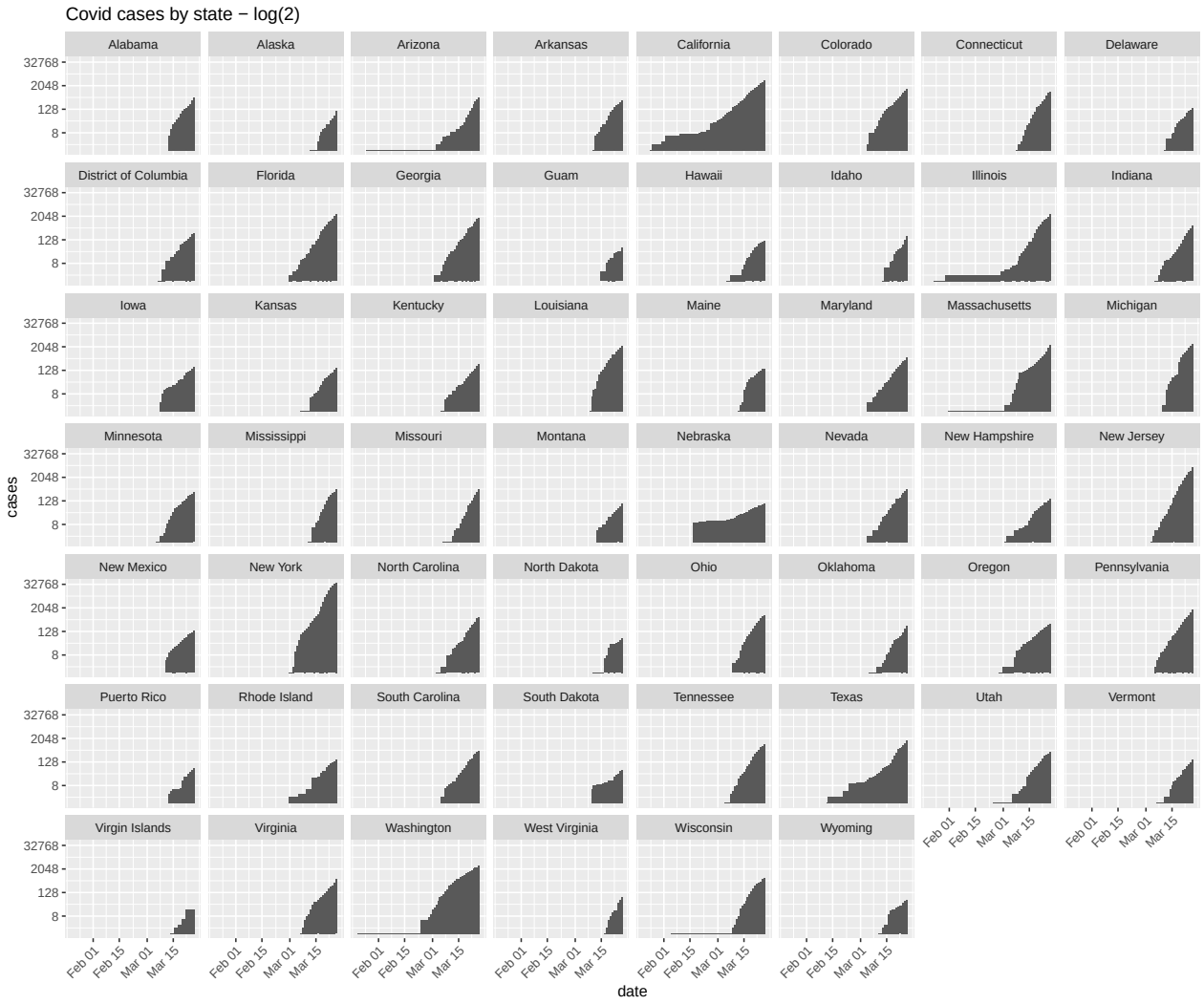
quick-analysis by state and WA county

```
us_states_raw <- read_csv("~/projects/covid-19-data/us-states.csv",
                      col_types = cols(date = col_date(format = "%Y-%m-%d")))

#us_states$state <- as.factor(as.factor(us_states$state))
#us_states <- mutate_if(us_states, is.character, as.factor)

df_us_states <- us_states_raw %>%
  mutate_if(is.character, as.factor)
```

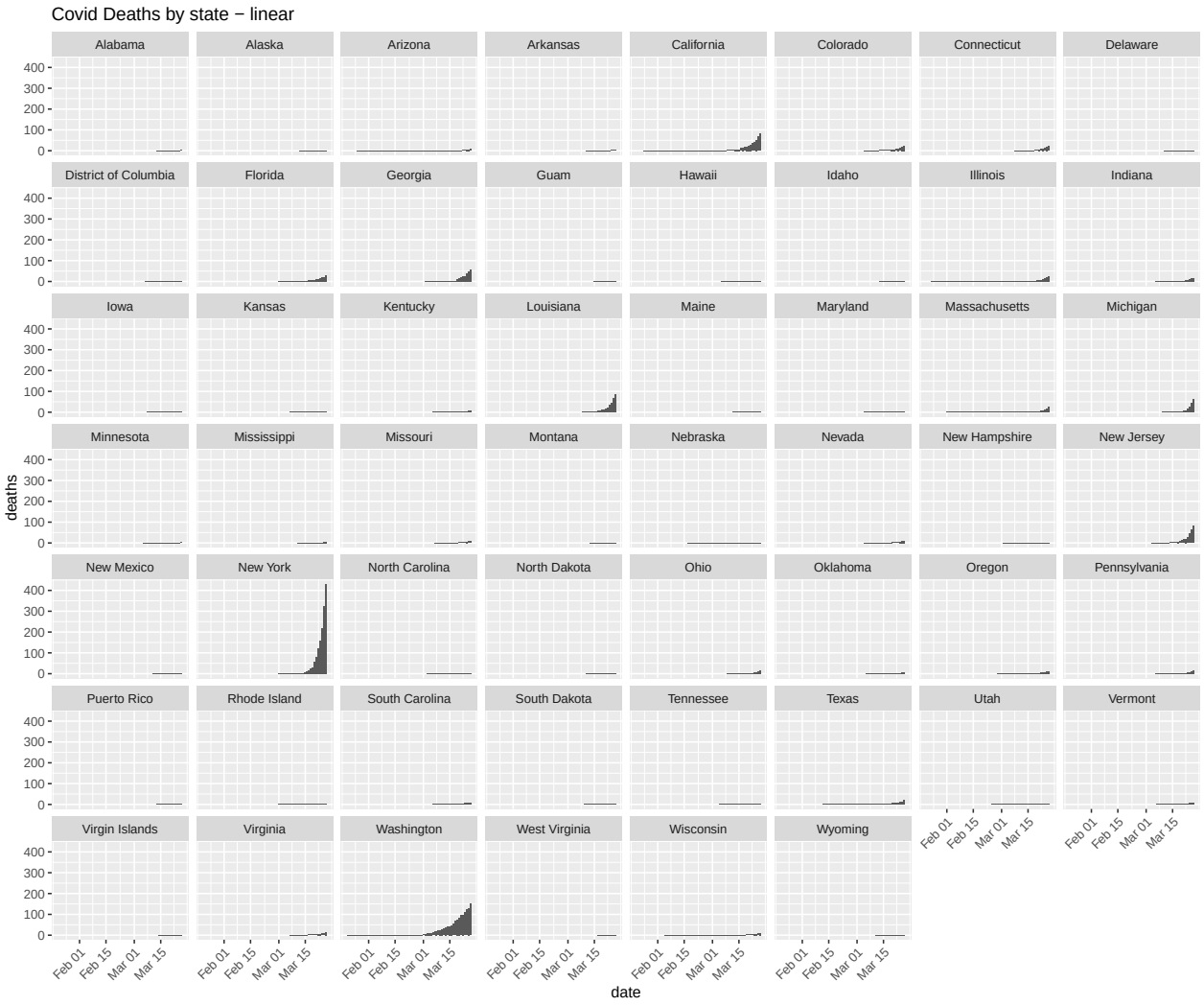
```
p <- ggplot(df_us_states, aes(x=date, y=cases)) +
  geom_col() +
  facet_wrap( . ~ state) +
  ggtitle("Covid cases by state - linear") +
  theme(strip.text.x = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```



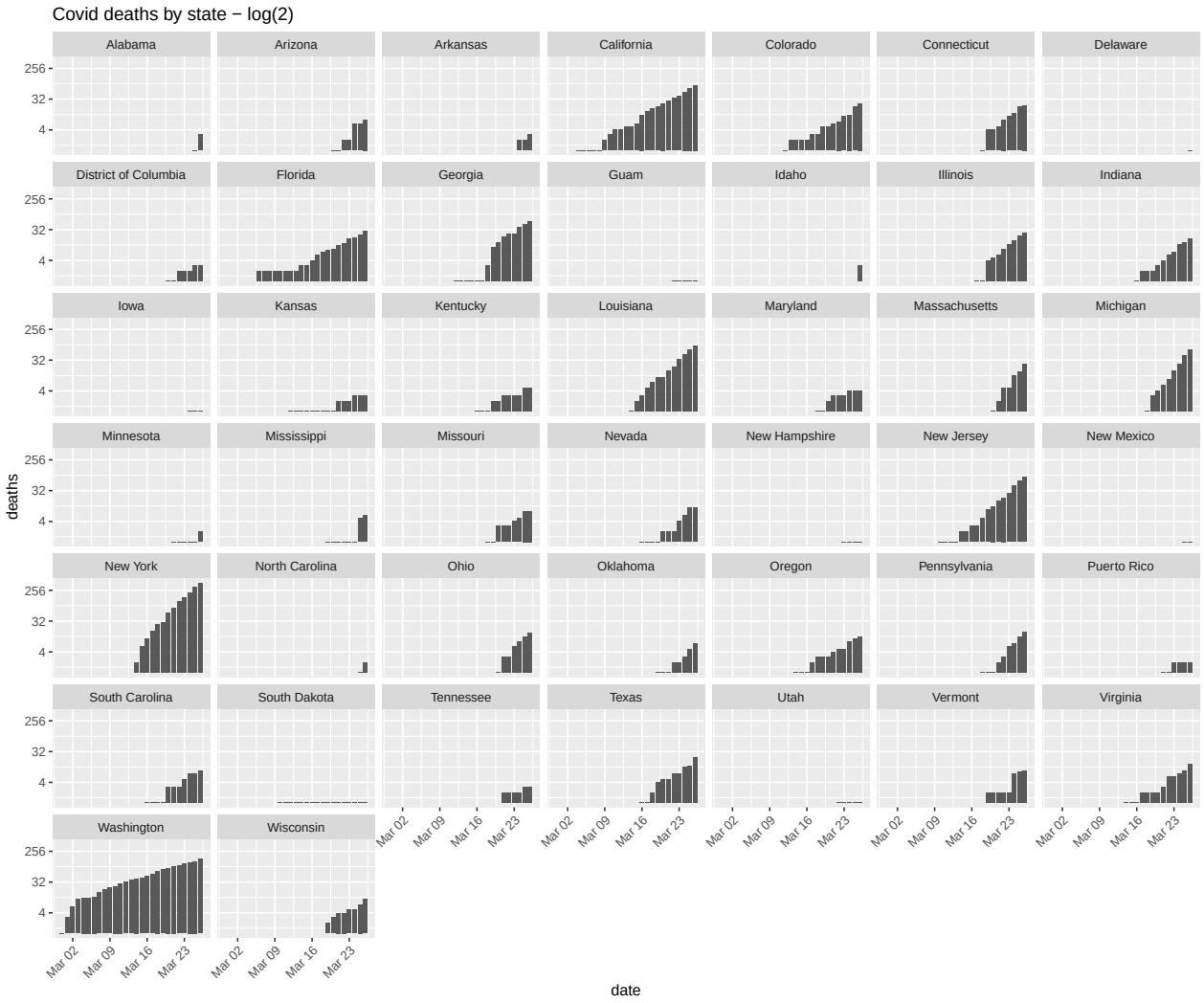

```
p <- ggplot(df_us_states, aes(x=date, y=cases)) +
  geom_col() +
  facet_wrap( . ~ state) +
  ggtitle("Covid cases by state - log(2)") +
  scale_y_continuous(trans='log2') +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```




```
p <- ggplot(df_us_states, aes(x=date, y=deaths)) +
  geom_col() +
  facet_wrap( . ~ state) +
  ggtitle("Covid Deaths by state - linear") +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```

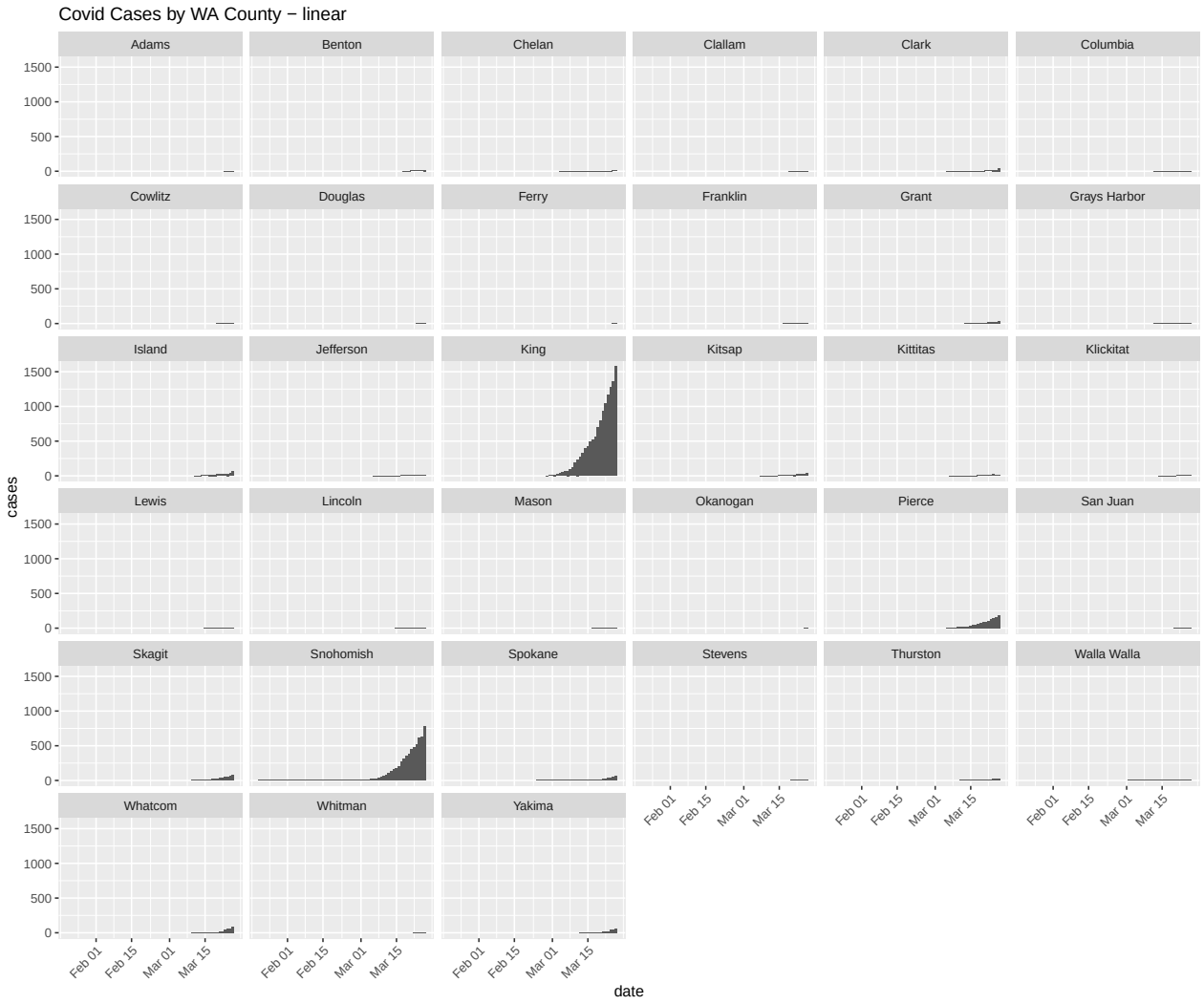



```
# strip out the zero's to prevent warnings about taking their log
df_us_states_zero_deaths <- df_us_states %>%
  select(date, state, deaths) %>%
  filter(deaths > 0)

p <- ggplot(df_us_states_zero_deaths, aes(x=date, y=deaths)) +
  geom_col() +
  facet_wrap( . ~ state) +
  ggtitle("Covid deaths by state - log(2)") +
  scale_y_continuous(trans='log2') +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```

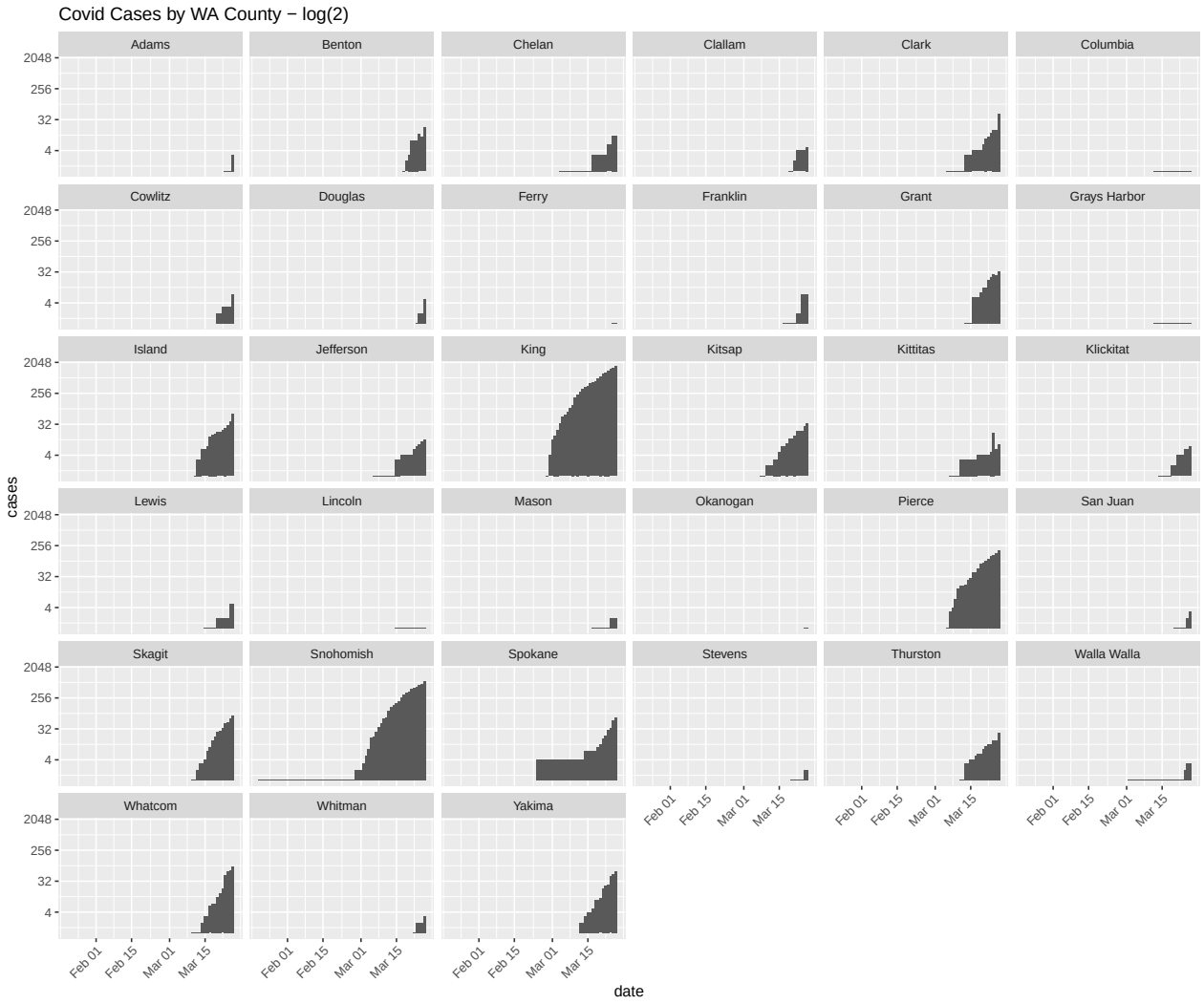



```
# let's pull in counties and look at washington

us_counties_raw <- read_csv("~/projects/covid-19-data/us-counties.csv",
                      col_types = cols(date = col_date(format = "%Y-%m-%d")))

df_us_counties <- us_counties_raw %>%
  mutate_if(is.character, as.factor)

df_wa_counties <- df_us_counties %>%
  select(date, state, county, cases, deaths) %>%
  filter(state == 'Washington')
```

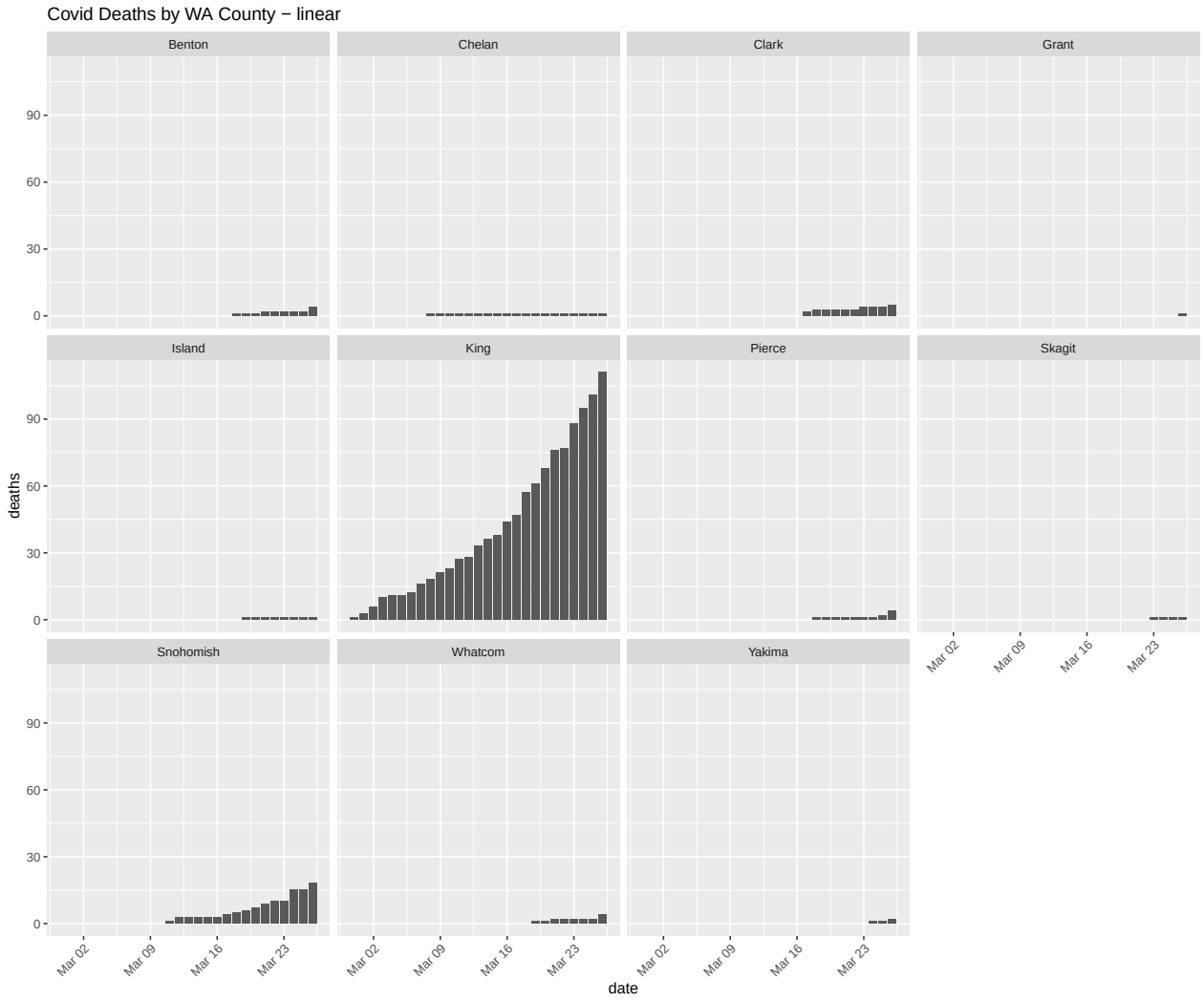
```
p <- ggplot(df_wa_counties, aes(x=date, y=cases)) +
  geom_col() +
  facet_wrap( . ~ county) +
  ggtitle("Covid Cases by WA County - linear") +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```



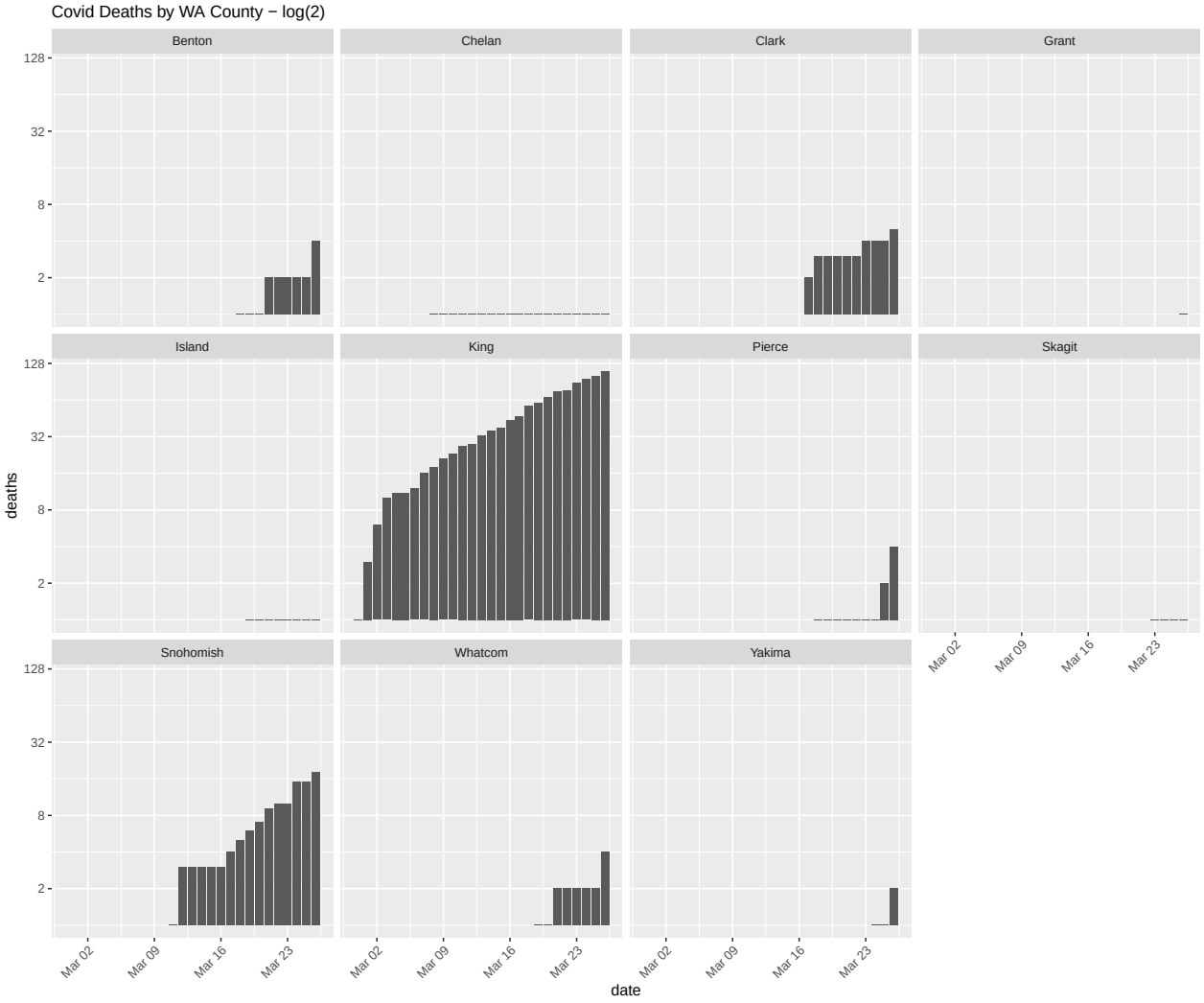

```
p <- ggplot(df_wa_counties, aes(x=date, y=cases)) +
  geom_col() +
  facet_wrap( . ~ county) +
  ggtitle("Covid Cases by WA County - log(2)") +
  scale_y_continuous(trans='log2') +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```




```
df_wa_counties_with_deaths <- df_wa_counties %>%
  filter(deaths > 0)

p <- ggplot(df_wa_counties_with_deaths, aes(x=date, y=deaths)) +
  geom_col() +
  facet_wrap( . ~ county) +
  ggtitle("Covid Deaths by WA County - linear") +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```




```
p <- ggplot(df_wa_counties_with_deaths, aes(x=date, y=deaths)) +
  geom_col() +
  facet_wrap( . ~ county) +
  ggtitle("Covid Deaths by WA County - log(2)") +
  scale_y_continuous(trans='log2') +
  theme(plot.title = element_text(size=12)) +
  theme(strip.text.x = element_text(size = 9)) +
  theme(strip.text.y = element_text(size = 9)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
 print(p)
```


Covid Deaths by WA County − log(2)
Benton
Chelan
Clark
Grant
Island
King
Pierce
Skagit
Snohomish
Whatcom
Yakima
deaths
128
32
8
2
Mar 02
Mar 09
Mar 16
Mar 23
date