Reporting data results #1

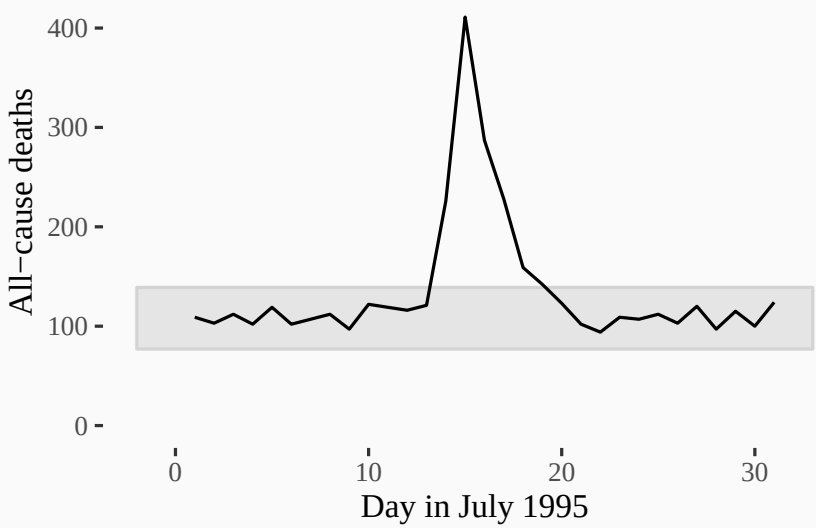
Highlighting interesting aspects

Highlighting

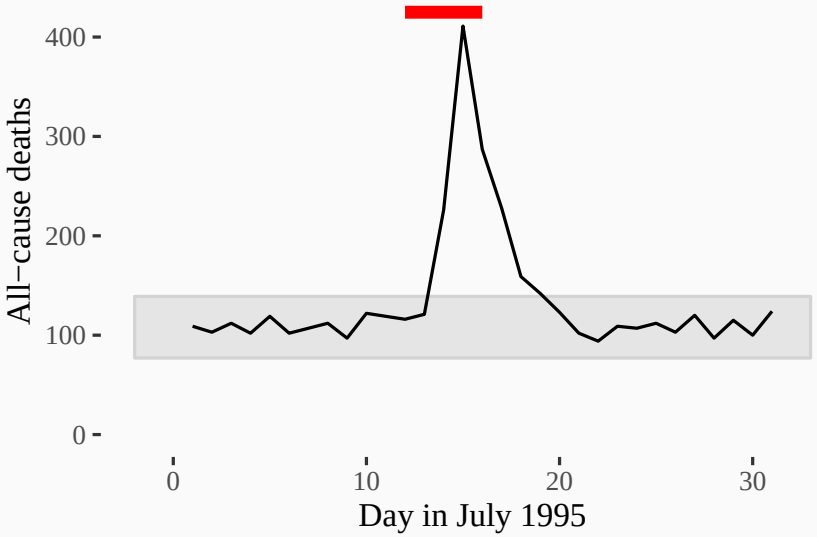
Guideline 4: **Highlight interesting aspects.**

Consider adding elements to highlight noteworthy elements of the data. For example, in the graph on the right, the days of a major heat wave have been highlighted with a red line.

1. No highlighting



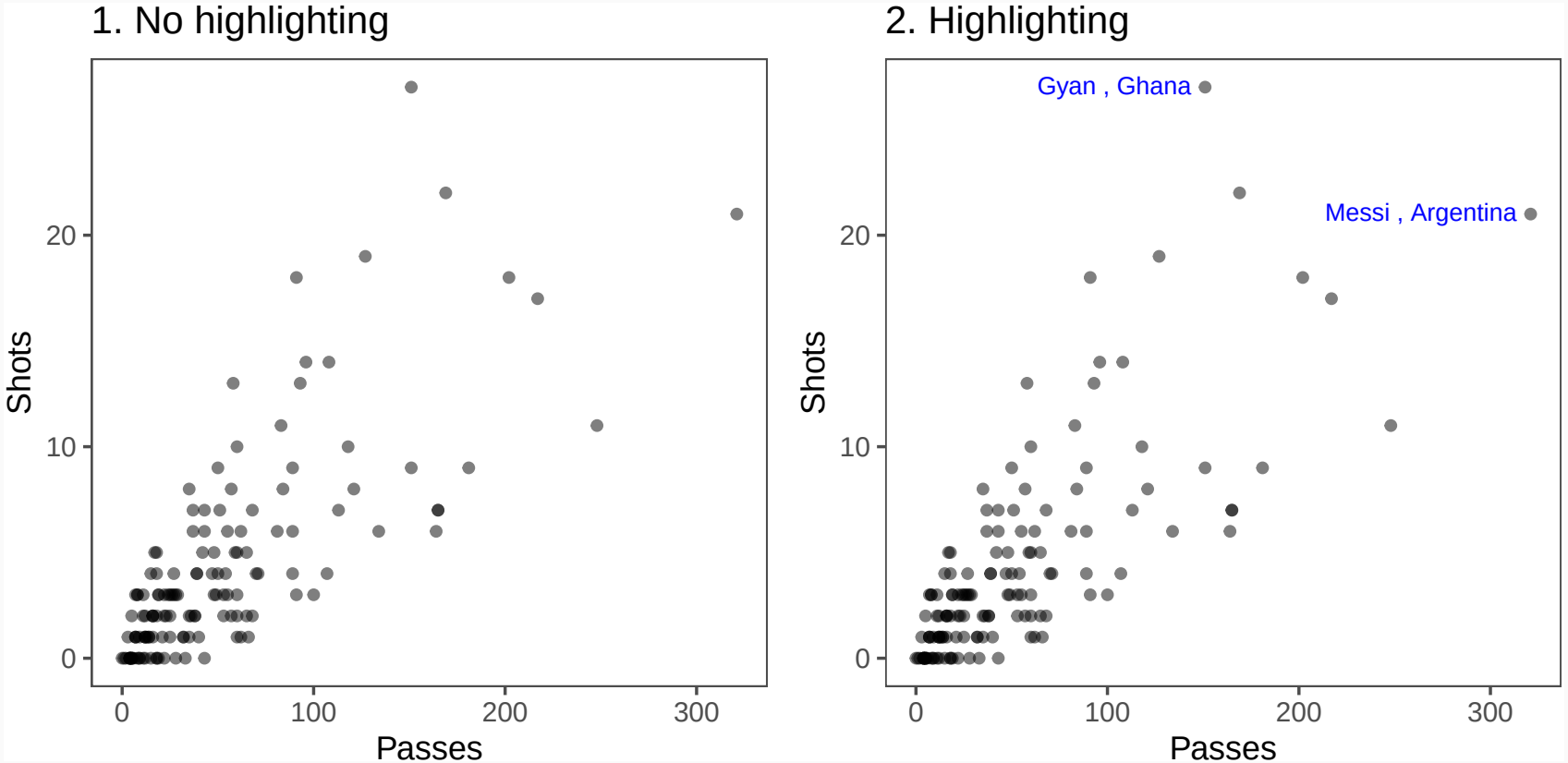
2. With highlighting



Highlighting

Guideline 4: **Highlight interesting aspects.**

In the below graphs, the names of the players with the most shots and passes have been added to highlight these unusual points.



Highlighting

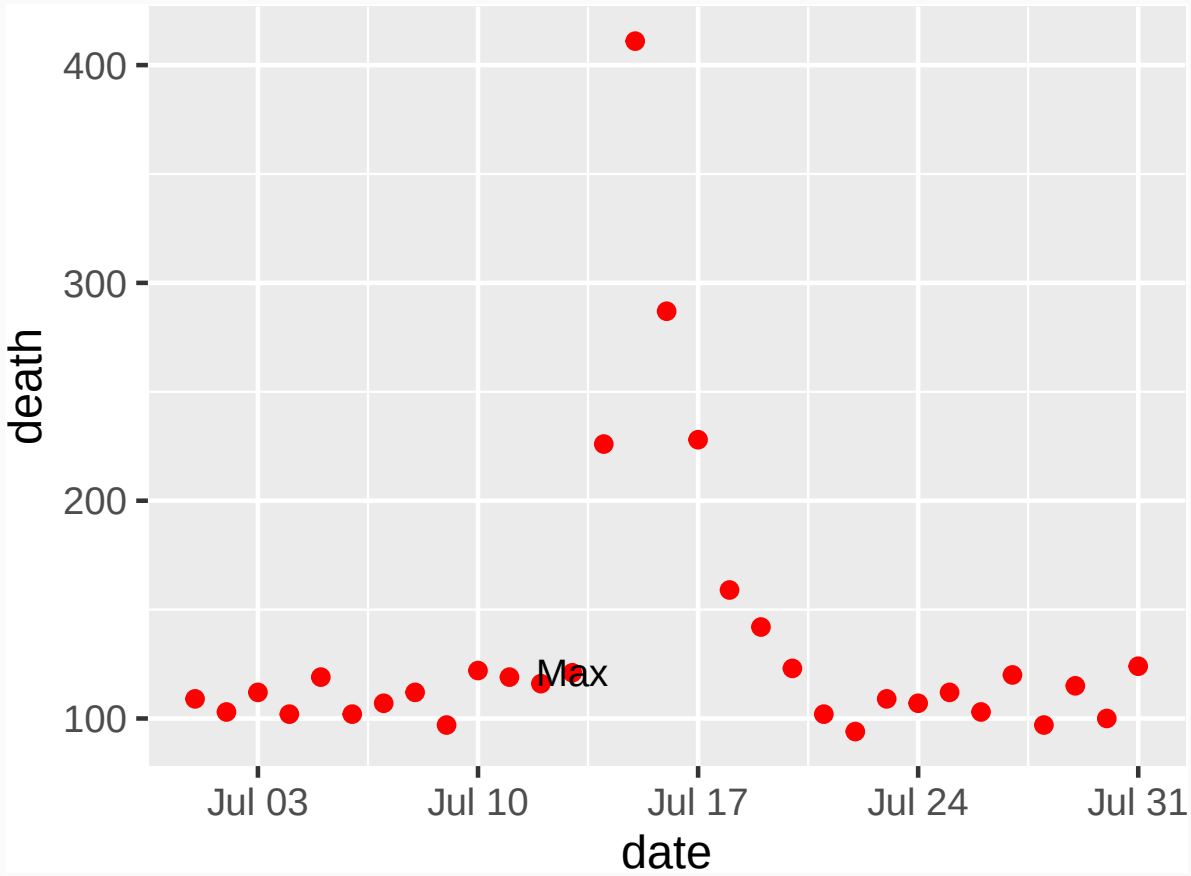
One helpful way to annotate is with text, using `geom_text()`. For this, you'll first need to create a dataframe with the hottest day in the data:

```
hottest_day <- chic_july %>%
  filter(temp == max(temp))
hottest_day %>% select(date:dow)
```

```
##         date time year month doy      dow
## 1 1995-07-13 3116 1995     7 194 Thursday
```

Highlighting

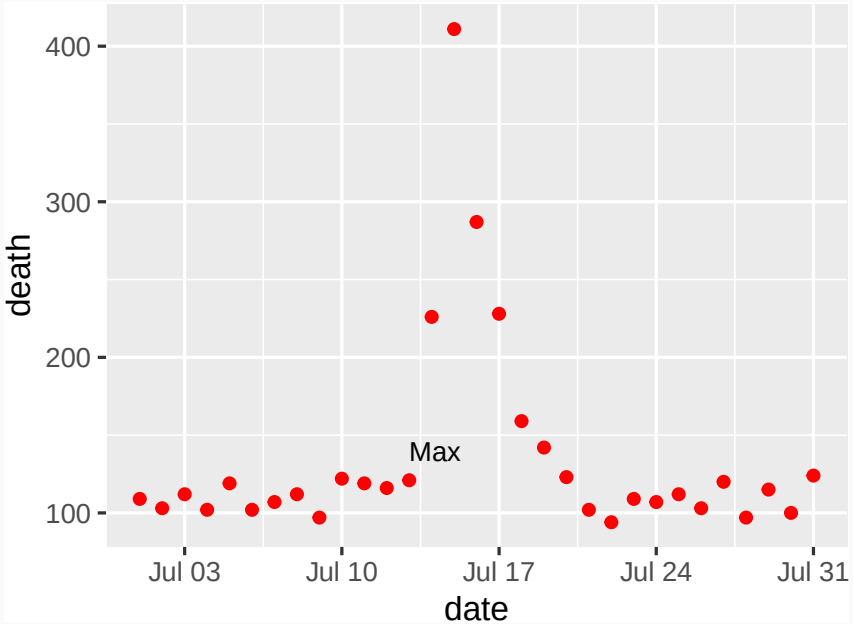
```
ggplot(data = chic_july, aes(x = date, y = death)) +
  geom_point(color = "red") +
  geom_text(data = hottest_day,
            label = "Max", size = 3)
```



Highlighting

With `geom_text`, you'll often want to use position adjustment (the `position` parameter) to move the text so it won't be right on top of the data points:

```
ggplot(data = chic_july, aes(x = date, y = death)) +
  geom_point(color = "red") +
  geom_text(data = hottest_day,
            label = "Max", size = 3,
            hjust = 0, vjust = -1)
```



Highlighting

You can also use lines to highlight. For this, it is often useful to create a new dataframe with data for the reference. To add a line for the Chicago heat wave, I've added a dataframe called `hw` with the relevant date range. I'm setting the y-value to be high enough (425) to ensure the line will be placed above the mortality data.

```
library(lubridate)
hw <- data.frame(date = c(ymd("1995-07-12"),
                          ymd("1995-07-16")),
                 death = c(425, 425))

b <- ggplot(data = chic_july, aes(x = date, y = death)) +
       geom_point(color = "red") +
       geom_line(data = hw,
                 aes(x = date, y = death),
                 size = 2)
```

```
b
```