

Projeto Final

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```
library(ggplot2)
library(outbreaks)
data("measles_hagelloch_1861")

head(measles_hagelloch_1861)
```

```
##   case_ID infector date_of_prodrôme date_of_rash date_of_death age gender
## 1      1      45   1861-11-21   1861-11-25      <NA>    7    f
## 2      2      45   1861-11-23   1861-11-27      <NA>    6    f
## 3      3     172   1861-11-28   1861-12-02      <NA>    4    f
## 4      4     180   1861-11-27   1861-11-28      <NA>   13    m
## 5      5      45   1861-11-22   1861-11-27      <NA>    8    f
## 6      6     180   1861-11-26   1861-11-29      <NA>   12    m
##   family_ID class complications x_loc y_loc
## 1         41    1           yes 142.5 100.0
## 2         41    1           yes 142.5 100.0
## 3         41    0           yes 142.5 100.0
## 4         61    2           yes 165.0 102.5
## 5         42    1           yes 145.0 120.0
## 6         42    2           yes 145.0 120.0
```

#Quantidade de pessoas com erupção cutânea reportadas por dia

```
dates_rash <- table(measles_hagelloch_1861$date_of_rash)
```

```
dates_rash <- data.frame(Date = format(as.Date(names(dates_rash)), '%d/%m/%Y'), Frequency = as.vector(dates_rash))
```

```
dates_rash
```

```
##           Date Frequency
## 1 03/11/1861          1
## 2 06/11/1861          1
## 3 08/11/1861          1
## 4 11/11/1861          2
## 5 13/11/1861          1
## 6 15/11/1861          2
## 7 17/11/1861          1
## 8 18/11/1861          1
## 9 19/11/1861          1
## 10 21/11/1861          3
## 11 24/11/1861          5
```

## 12	25/11/1861	9
## 13	26/11/1861	11
## 14	27/11/1861	12
## 15	28/11/1861	2
## 16	29/11/1861	7
## 17	30/11/1861	5
## 18	02/12/1861	5
## 19	03/12/1861	3
## 20	04/12/1861	8
## 21	05/12/1861	25
## 22	06/12/1861	17
## 23	07/12/1861	26
## 24	08/12/1861	12
## 25	09/12/1861	4
## 26	10/12/1861	4
## 27	11/12/1861	3
## 28	12/12/1861	1
## 29	13/12/1861	3
## 30	15/12/1861	4
## 31	16/12/1861	3
## 32	17/12/1861	2
## 33	18/12/1861	1
## 34	19/12/1861	1
## 35	27/01/1862	1

```

dates_rash$Date <- factor(dates_rash$Date, ordered = T)

ggplot(dates_rash) +
  geom_point(aes(x = Date, y = Frequency)) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))

```

