

Non-Insured

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```
require(openxlsx)
```

```
## Loading required package: openxlsx
```

```
require(maps)
```

```
## Loading required package: maps
```

```
require(ggplot2)
```

```
## Loading required package: ggplot2
```

```
require(mapproj)
```

```
## Loading required package: mapproj
```

i imported the xls to xlsx by google sheet.

```
abc<-read.xlsx("~/Documents/R Programming/Census/spreadsheet.xlsx")
```

get ride of two first rows:

```
abc<- abc[-c(1,2), ]
```

there are couple of columns that i want to get ride of too

```
abc <-abc[, -c(9:12) ]  
abc <-abc[, -c(2:6) ]  
abc <-abc[, -c(3) ]
```

and how to remove those “.....” infront of each state? after several time try dot dot dot... i realized the “.” that is used in this table part of them is different from regualr dot. So I had to copy it from the table by view(abc) and replace it with “”.

```
abc$State <- gsub("...", "", abc$State, fixed = TRUE)
abc$State <- gsub(".", "", abc$State, fixed = TRUE)
```

character to numeric

```
abc$`2015.Uninsured` <- as.numeric(abc$`2015.Uninsured`)
```

changing the name

```
colnames(abc) [2]<- "Uninsured"
```

Creating the map

```
abc$region <- tolower(abc$State)
states <- map_data("state")
map.df <- merge(states, abc, by="region", all.x=T)
map.df <- map.df[order(map.df$order),]
head(map.df)
```

##	region	long	lat	group	order	subregion	State	Uninsured
## 1	alabama	-87.46201	30.38968	1	1	<NA>	Alabama	484
## 2	alabama	-87.48493	30.37249	1	2	<NA>	Alabama	484
## 3	alabama	-87.52503	30.37249	1	3	<NA>	Alabama	484
## 4	alabama	-87.53076	30.33239	1	4	<NA>	Alabama	484
## 5	alabama	-87.57087	30.32665	1	5	<NA>	Alabama	484
## 6	alabama	-87.58806	30.32665	1	6	<NA>	Alabama	484

```
ggplot(map.df, aes(x=long, y=lat, group=group))+
  geom_polygon(aes(fill=Uninsured))+
  geom_path()+
  scale_fill_gradientn(colours=rev(heat.colors(30)))+
  coord_map()
```

