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Health and Economy

Reproducible Research Assignment 2: Analyzing the impacts of Severe Weather Events on Health and Economy

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Synopsys

The basic goal of this analysis is to explore the **NOAA Storm Database** and answer some basic questions about severe weather events.

The data analysis will address the following two questions:

- Across the United States, which types of events (as indicated in the **EVTYPE** variable) are most harmful with respect to population health. In order to answer this question couple of variables in the dataset will be used to measure the impact of a severe weather event on population health, namely, **INJURIES** and **FATALITIES**. Also, a new derived variable **Health_Hazards** will be created by adding the other two variables to measure the total impact.

- Across the United States, which types of events have the greatest economic consequences.In order to answer this question, again another couple of variables in the dataset will be used to measure the impact of a severe weather event on economy, namely, **PROPDMG** and **CROPDMG**. Also, a new derived variable **Prop_Hazards** will be created by adding these variables to measure the total impact.

The exploratory data analysis will be done using R and **barplots** will be used to compare the impact of a severe event, both on population health and economy. Two sepearate analysis will be done to answer to two different questions.

As will be seen, **TORNADO** has the highest impact in terms of harmfulness in both the cases.

Data Processing

```
storm <- read.csv("repdata-data-StormData.csv")
names(storm)
```

```
##  [1] "STATE__"    "BGN_DATE"    "BGN_TIME"    "TIME_ZONE"
"COUNTY"
##  [6] "COUNTYNAME" "STATE"       "EVTYPE"      "BGN_RANGE"
"BGN_AZI"
## [11] "BGN_LOCATI" "END_DATE"    "END_TIME"    "COUNTY_END"
```