

Real Life Applications of Statistics

- Statistics is the science of collecting, simplifying and describing data, as well as drawing conclusions based on the analysis of the data.
- There are so many applications of Statistics in real life but some of them are outlined below:

1) Statistics are used in Medicine in the prediction of diseases. For example 90% of people who die of lung cancer are smokers so this statistic can be useful to explain one of the dangers of smoking. In order to come up with the 90% figure, doctors would have had to record data on patients dying from lung cancer and what percentage of them were smokers.



2) Statistics are used by any company making a product. It often isn't possible to check every individual product being made but a "sample" would be selected and checked for defects. If the sample is ok, the chances are, the rest of the products are ok as well.



3) You have probably seen various poll results in newspapers and other media, particularly around election time. Political parties can examine this data and address any "problem areas" where they are not polling well before the actual election day.



4) Insurance companies set their premiums based on statistical data of previous events. For example, car insurance for an 18 year old driver is very high because they are statistically more likely to have an accident than older drivers. Some insurance companies do not cover houses in Cork for flood damage, even if you live on higher ground, because Cork is statistically very likely to experience flooding. See picture from 2010!



5) Bookmaking is an industry based entirely on statistics. In soccer for example, "bookies" would look at previous data of games and can calculate the odds of a particular team winning a game from this data. They can also provide odds on a certain player scoring the first goal, or the first player to get a yellow card, using statistics collected from previous games. People betting ("punters") would then bet on the strength of these odds.

