

## Assumptions:

- An allergic reaction only exists if there has been a previous reaction and that an allergic reaction will stay with them forever (i.e.: you don't lose the allergy, but the gravity of reaction may decrease over time)
- An allergic reaction will always be medicated (no natural passing or recovery)
- A vaccine may be injected more than once (i.e.: influenza vaccinations) and multiple vaccinations may be done in a day (i.e: MMR Vaccine which includes Measles, Mumps and Rubella)
- Many vaccinations may be done by many medical practitioners (i.e.: not a single home doctor that does every injection)
- A vaccine can only be produced by a medical listed company
- A vaccine batch can be bulk manufactured by different companies which may produce more than one vaccine



