1 Plan of Attack

In order to model the development of the **Ebola** outbreak and it's eradication, we combine multiple celebrated mathematical models. We recognise activity on multiple levels: city, region, and global. On the city level, we use an extension of classical SIR model **!lähde!**for the in-city dynamics. Region consist of city, which interact (according to model **!lähde!**) moving the disease. Regions also interact with each other on a higher level through the most critical cities in a region. The vaccination system is then added to this dynamics.
The 'World Map' is created with data about the current (around 3000) most populated cities **!lähde!**. Traffic information is used to estimate movement between cities **!lähde!**. This data in mind, a network between cities and regions is created: the **Ebola** only disperse through these routes.
Different vaccination strategies are tested evolutively **!TODO!**and their expense estimated using results from similar disease spreads and vaccination costs (see **!lähde!**) **!TODO!**.