**Immunisation – The basic science**

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In order to understand how vaccines work, it is necessary to have a basic understanding of the immune system and how it functions, as well as how the micro-organisms enter into the body and do damage.

This presentation will address the different types of micro-organisms and the factors that influence transmission and the risk of contracting infectious diseases.

The two types of the immune system; namely the innate immunity and acquired immunity will be covered, with respect to how vaccines work. T cell mediated immunity and T independent immunity (humoral immunity) will be explained.

The various types of vaccines will be discussed including the pros and cons of the different types and some practical tips on administration will be given, such as which vaccines can be given at the same time.