

# WHY ARE NEW GENERATION HYGIENE COATINGS ESSENTIAL?

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Conventional hygiene coatings are typically Anti-Bacterial or Anti-microbial – This does not mean they will work in an anti-viral capacity against a virus like Coronavirus. Although bacteria and viruses both cause disease they are completely different in form and function.

Bacteria and Viruses are structured very differently, and live, grow and behave in different ways.

**Bacteria** can live and reproduce inside and outside of the body on different surfaces whereas viruses can only survive and grow within certain cells which are already living (host cells).

**Viruses** are a lot smaller than bacteria and use the host cells to grow and reproduce; As they cannot survive without entering other cells they are not actually classified as living organisms. When a virus enters the host cell, it takes control of that cell and uses its resources to reproduce until there are so many viruses that the cell bursts. These viruses then find new host cells and can therefore multiply very quickly.

**Bacteria** are usually easy to treat using antibiotics, as they are cells in their own right and are a lot easier to access within the body.

**Viruses**, however, can be very difficult to treat as medication and other forms of treatment often do not have access into the cells where they are living. The most effective way of treating viruses is by having a vaccine before your body gets infected with the virus, which teaches your body how to deal with the virus so that it can fight it effectively as soon as it enters the body.