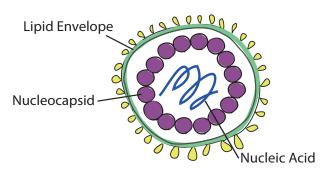
## A QUICK GUIDE TO HOW ALLTEC PRODUCTS WORK AGAINST ENVELOPED VIRUSES



So this is a basic 'enveloped' virus. The virus is enclosed by a lipid membrane (a fat like substance,) this membrane (envelope) is used by the virus to attach itself to the host cell, the virus then penetrates the host cell and replicates itself. The envelope is actually quite fragile, and susceptible to changes in temperature, pH levels and disinfectants.

Examples of Enveloped Viruses: Chicken Pox Influenza A Hepatitis C HIV and of course, Coronaviruses



Like most enveloped viruses, outside of the human body they are very weak and easily destroyed with hot water and disinfectant (hence all the media advice to wash your hands!) Needless to say, you cannot kill visues so easily once they are inside the human body, so never, ever consume a disinfectant!

There are various agents that are effective against enveloped viruses, the best one is actually common bleach, but you can't go splashing that stuff around customers' soft furnishings! The most well known version is probably alcohol, such as in hand sanitisers, it works very quickly but it evaporates so how long it will last is limited.

QATs (or quaterary ammonium compounds) take longer to work but provide longer lasting protection. They are best applied and left on the surface in order to (in effect) kill the virus. They disrupt the envelope membrane, which exposes the nucleocapsid, affecting it's ability to infect subsequent cells.

The great thing about QAT's is that you can use them on pretty much all surfaces - any wet cleanable fabrics and hard surfaces - so you can pre-spray your customers' carpets and upholstery, apply it by sprayer to floors, door handles, work surfaces, you can even use a fogging machine to sanitise an entire room. It's actually best applied by misting, not by cloth (cloths are awful cross contaminants!)

So the long and the short of it is that we use these QATs in our *Envirosafe*, *Bio Cleaner* and *Eco Spotter*. We've sold them for years as anti-microbial cleaners and spot removers. As well as viruses, they also kill many bacteria, fungi and mould. They are particularly useful in care homes, doctors' surgeries, schools, homes where there has been an illness or any environment where virus and bacterial control is required.

So hopefully you now understand how our products work!