

## Health Protection Agency, Porton Down

We have, over the years, had many tests conducted at Porton Down, the government aero-biology testing chamber. These tests are different to tests at Leeds University. The chamber (which is roughly the same size as the one at Leeds) is filled with a fixed volume of pathogens. The control records how quickly these pathogens die in the air inside the chamber in the absence of the AD unit.

The test then compares the rate at which the organisms are killed when the chamber has an AD operating within it, to the control as outlined above.

For safety reasons the pathogens used at Porton Down are called surrogates. These are bacteria that are less harmful to humans but otherwise behave in exactly the same way as their dangerous counterparts.

The third study charts were undertaken by the Health Protection Agency and the effect of the device on *E. coli*.

To simulate the behaviour of viruses, what is called a coliphage is used. This is an organism that is very similar to a virus, although a little tougher, but which can be grown in a bacterial culture - to produce large volumes of a virus itself is a complicated and drawn out process, which is why a surrogate was used.

