

Neil Bromage reports on a controversial chemical that it is claimed will reduce the risk of diseases in planes and ships

Airlines shun health safeguard

A British company has manufactured a chemical that it says will reduce the risk of airborne diseases on aircraft and ships — only to be told by airlines that there is no need for it.

Envirotech, based in Skelmersdale, Lancashire, has spent the past year taking samples from the filters, upholstery and carpets of aircraft and cruise ships to investigate the problems of cross-contamination. The company manufactures a product — Envirocare — that, according to independent analysis, will kill the bacteria and viruses that cause many travel-related illnesses.

Envirocare, which comes in powdered or liquid form, is already being used by manufacturers of plastic sheeting, carpets and upholstery. It can also be sprayed on food-preparation surfaces. The company claims it will kill the likes of E coli, salmonella, legionella, hepatitis B, MRSA — the "super-bug" that has infected hospitals

recently — influenza and even HIV. About a third of all travellers are believed to become ill in some way and the air-conditioning systems of hotels, cruise ships and aircraft have been blamed for several outbreaks of Legionnaire's disease over the past 10 years.

The Passenger Shipping Association cautiously welcomed the development of Envirocare. Bryony Coulson, the deputy director, said: "If this product does what it says, it could have useful applications on cruise ships."

The airlines, however, are not convinced.

A passenger who regularly flies club class with British Airways wrote to Envirotech to complain that on "at least five different occasions" he and his wife have suffered "severe attacks of bronchitis or gastric flu", which "both we and our doctor attribute directly to BA flights".

Dr Michael Bagshaw, the head of medical services at BA, said this

week that he was "entirely happy" that the airline's cabin air quality is of the highest standard and that the risk of a passenger becoming ill through flying was remote.

In his reply, he said: "Whenever people travel, they are exposed to microbiological organisms with which their immune systems are not familiar. This exposure can occur at any time... not just on board the aircraft."

He added that recirculated air on British Airways aircraft was "germ-free" and that "airborne bacteria and viruses cannot live in carpets or on upholstery because they need body temperature and moisture to survive."

However, Dr Tom Makin, a senior microbiologist at Royal Liverpool University Hospitals, disagreed. "Some bacteria and viruses can certainly survive in carpets and upholstery sufficiently well to be a danger to people's health," he said.

He added that the confined nature of air travel and a closer

proximity of bodies could increase the risk of illness from airborne bacteria and viruses.

The airlines say that the high-quality filters they use reduce the levels of bacteria, but Dr Makin said that viruses can pass through filters. "A high-quality filter and regular recycling will significantly reduce the levels of bacteria in the air, although it will not have any effect on viruses that can pass through the filters," he said.

"If the filter fails, however, or is not replaced regularly, the concentration of bacteria will build up, particularly in confined, pressurised environments."

John Egerton, from Envirotech, recently took samples from the carpet and seat of a Boeing 747 flown by one of the principal British airlines and had them analysed by the independent Aynsome Laboratories. A range of micro-organisms was found.

A spokesman for Aynsome said the results showed more bacteria

"than would be expected in that environment". The company said the results "raise the question of the potential survival of pathogens and, more importantly, the consequent redistribution of these organisms through the aircraft by the ventilation system".

Andy Ray, Aynsome's chief chemist, said: "In any environment where bacteria are rife, the use of Envirocare will serve to kill that bacteria and therefore reduce the illness that results."

Peter Barrett, *The Daily Telegraph* Travel section's "Flying Doctor", said Envirocare might be of use in reducing the transmission of disease through aircraft filters, but added that, as most of the illnesses are transmitted directly through the air, the impregnation of carpets or upholstery might not make a lot of difference. "It may prevent the survival of pathogenic bacteria, but only as long as the bacteria or viruses come into contact with it," he said.