

## **Germ Warfare**

**By Dr Robert Spencer**

Dr Spencer provided the Cirencester Science and Technology Society with a most entertaining and interesting talk on a subject that carries a significant overlay of fear for many of us.

The lecturer, who is head of the Health Protection Agency, briefly traced the history of the use of biological and chemical agents in warfare over many centuries. His first historical example was from the siege of Kaffa in the 14<sup>th</sup> century when the Mongols attempted to infect the enemy with bubonic plague by catapulting plague victims over the enemy's ramparts. However, this was a largely unsuccessful effort as the fleas that spread the plague are carried by live victims and the dead bodies were therefore not the most appropriate hosts in this situation.

Of the various contagious diseases that have proved fatal to large numbers of humans the most deaths have been caused by smallpox. Although unplanned, the success of the conquistador Cortez in Mexico was aided in no small measure by the inability of the indigenous Mexican Indians to fend off smallpox brought from Europe.

In the 1763 British campaign in North America headed by Lord Amherst, the commander of the British forces in at the time, it has been reported that the distribution of smallpox infected blankets to the natives caused a massive number of fatalities and could thus be one of the earlier examples of germ warfare.

Germ warfare has also been used against animals with examples of anthrax employed in the 1914-18 war to kill large numbers of pack animals and attempts by the allies in the Second World War to kill large numbers of cattle in Germany through air drops of anthrax impregnated cattle cake. Although this latter idea was never fully employed Saddam Hussein is widely reported to have used anthrax against the substantial Kurdish population in Iraq.

In the mid 1990s a Japanese sect released Sarin gas in Matsumoto and again on the Tokyo subway that resulted in more than 20 deaths and thousands of hospital cases.

The lecturer summarised the current situation by highlighting the various measures, such as public awareness, antidote stockpiling and preventative planning that are in place for protecting the public in the event of a possible attack.