Germ war cloud floated over shire counties

Area from Yeovil to Guildford secretly sprayed in 1950s as Porton Down tried to counter feared Soviet biological attack in cold war

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The names of a string of towns and villages from Yeovil to Guildford which were secretly sprayed in large-scale germ warfare experiments in the 1950s can today be revealed in newly released documents.

Wiltshire, Hampshire, Berkshire, Dorset, Somerset and Surrey were the main areas for the trials conducted from the chemical and biological warfare establishment at Porton Down, Wiltshire. The trials are now the subject of an official inquiry by an independent scientist.

The ministry of defence has conceded that the chemical spray could have been harmful and agreed earlier this year to set up the inquiry to establish whether the trials caused any illnesses among the public.

It will be the second inquiry into the panoply of trials during which the chemical spray and bacteria were covertly dispersed over huge swathes of Britain during the cold war.

Scientists from Porton Down sought to determine how vulnerable Britain was to biological attack and to find ways of protecting the country.

Matthew Taylor, the Liberal Democrat MP for Truro and St Austell, said yesterday: "It is astounding that the government could expose British people, who knew nothing for decades, to possible harm in these trials. It is ironic that this was done in the cause of defending the country. It was as if whole chunks of the country had been turned into an experimental laboratory."

Porton is also being investigated by police over its gas chamber experiments on human "guinea pigs" and the death of a young serviceman in a nerve gas test.

The new batch of documents - released to Mr Taylor by Porton - detail how the scientists began the trials in 1953. They were worried that the Russians could disseminate a cloud of deadly germs over massive tracts of Britain from a ship or plane.

To assess how far such a cloud would float over the country, Porton scientists decided to disperse a marker chemical - known as zinc cadmium sulphide - to simulate the path of these clouds.

These fluorescent particles could be traced and counted at numerous sampling points.

In the first trial in November 1953 the chemical was sprayed in an arc from a disused RAF station near Beaulieu in Hampshire northwards for up to 50 miles over Winchester towards Newbury, Berkshire, and Devizes, Wiltshire.

In March 1954, the chemical was again sprayed from Beaulieu, but this time over Shaftesbury and Blandford, Dorset, to Yeovil, Somerset, 50 miles away.
This trial was repeated a month later, although this time the compound was emitted from Porton itself.

In May 1954, Porton scientists released the zinc cadmium sulphide from an RAF base near Yatesbury, Wiltshire, southwards over Warminster, Shaftesbury and Blandford. The sampling points were erected in lines 25 miles away between Salisbury and Mere, Wiltshire, and 50 miles away between Hurn and Cerne Abbas, Dorset.

Two months later, the chemical was dispersed from RAF Hullavington near Chippenham, Wiltshire, eastwards, with the lines of samplers placed firstly in a line 25 miles away near Hungerford, Berkshire and then 50 miles away between Pangbourne and Basingstoke in Hampshire.

A week later, the chemical was sprayed over 80 miles. A generator was towed along a road near Frome, Somerset, while it spewed out the chemical for an hour. Thirty miles away, sampling machines between Salisbury and Marlborough, Wiltshire, were used to monitor the cloud. Another line of samplers had been positioned near Guildford in Surrey, between Ottershaw and Selsey Bill on the Sussex coast.

The experiments changed tack in 1955. On six occasions, Porton scientists disseminated large quantities of the chemical for 25 miles around their establishment so that RAF planes could fly through the clouds and measure their progress. Sampling equipment fitted on to vehicles also tracked the particles on roads around Wiltshire.

From 1956, the trials were greatly expanded as military planes began to spray large amounts of zinc cadmium sulphide around the country.

It was revealed last year that in at least 12 trials in the late 1950s, these planes flew long distances - usually 250 miles - along the coast, dropping the chemical which then drifted miles inland.

In one trial, zinc cadmium sulphide was discharged from a plane from Cornwall to Sussex. Samples of the cloud were collected throughout south-west and central England, parts of Wales, and as far as Yorkshire.

Scientists wanted to see if it was possible to hit a specific target, Coventry, with the particles. Virtually every region in England and Wales was blanketed with the chemical at one time or another in these tests.

The MoD has now conceded that since the end of the trials, "doubts" about the safety of zinc cadmium sulphide have arisen.

The ministry argued that the compound was "probably harmless" and "probably caused no human illness", but set up the inquiry to settle the matter.

A ministry spokeswoman said the MoD had had difficulty finding a scientist with the right expertise to head the inquiry.

An earlier inquiry has already been conducted into another set of germ warfare trials. In the 1960s and 1970s, micro-organisms were sprayed extensively over populated parts of Dorset, Hampshire and Devon, triggering protests from residents when they were revealed two years ago.

The inquiry by an Oxford university microbiologist, Brian Spratt, concluded last January that the trials were unlikely to have harmed the overwhelming majority of healthy residents, but a small number of vulnerable, or already sick people could have suffered infections.