

Press release: 200 miles and countless tests: Porton Man three years on

Three years after it arrived, the Defence Science and Technology Laboratory's (Dstl) Porton Man is proving its pioneering value by helping to shape the way the UK and the US develop the latest in suited protection against chemical and biological (CB) warfare.

The life-size robot mimics the movement of a serviceman in combat. Built using lightweight materials developed for Formula One racing cars, it can walk, march, run, sit, kneel and lift its arms to sight a weapon like an infantry soldier.

Based at Dstl's Porton Down site in Wiltshire, it is the only robot of its kind in the world that can carry out real-time tests. This enhanced capability allows scientists can assess chemical penetration through materials as it happens during exposure in a specially designed contained chamber.

Dstl scientists say this model of Porton Man is a step change in technology and while a number of similar systems exist around the world, they are unable to conduct live agent chemical warfare agent tests.

The model has initiated a close working relationship with US Department of Defence resulting in Porton Man now being used by the US to support Chemical, Biological and Radiological (CBR) programmes.

Dr. Terrence G. D'Onofrio is a US Scientist who has been working with the Dstl team for the last two years, says: "The ability to measure cumulative and real-time breakthrough of actual chemical agent through a whole-system protective ensemble is a critical advancement for protecting our forces. Such a capability is an important opportunity to expand international collaboration, promote interoperability of equipment between the nations, and assist with burden sharing of research, testing, and evaluation".

Since its introduction Porton Man has run over 200 miles, carried out an extensive number of trials and has been exposed to various chemical warfare agents.

Chemical and biological warfare is very much still a world-wide threat; historically, older Porton Man models helped introduce the current UK in-service CBR suits (MK4a). This new Porton Man has now been involved in an extensive number of chemical warfare trials and is providing 'never seen before' results, which will inform design of the next generation of CBR protection.

[Porton Man video](#)