EFFECTS

Home Office figures challenged

62 pc deaths claim in nuclear attack

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Independent research into e effects of nuclear tacks on Britain show sualty levels between two d five times greater than ose predicted by Home fice assumptions, a con-ence heard yesterday.

The research, carried out at wcastle University, shows t the nuclear attack assumed the 1980 "Square Leg" Civil fence exercise would cause deaths of 62.1 per cent of population, compared with imates from Home Office ures that only 24.5 per cent uld die.

The authors of the report im that the low casualty ures produced by the Home ice computer model are the ult of errors, obsolete umptions, extreme optimism, political interference.

They say that the apparent son for the deception is to ify Home Defence, which uld otherwise be seen to be olly ineffective, and to make retention and expansion of lear weapons politically fea-e by allaying public fears.

Ir Stan Openshaw, of the artment of Geography at vcastle University, and Mr I Steadman, of the Centre Configurational Studies at Open University, presented r findings at the annual ference of the Institute of ish Geographers in Edin-gh.

Presenting the paper, Mr Openshaw said deaths could not be predicted with any accuracy because they were so many variables, such as the yield of the weapons, the height at which they exploded, weather conditions, and the location of the target.

The majority of deaths in nuclear explosions were from blast, burns and radioactive fallout.

The Home Office model of casualty estimates differed in several respects from those of the authors.

The Home Office excluded any burns casualties; they estimated a smaller area affected by blast from airburst weapons; they seriously under-estimated level of damage to houses; they over-estimated the protection given by buildings; and they over-estimated the level of radiation required to kill 50 per cent of a group of healthy adults.

The Home Office models themselves were not published, but the authors tried to replicate these from the available published material.

The authors examine a number of different levels of nuclear attack on Britain, ranging from the small attacks considered possible in the 1950s to the larger attacks now made possible by multiple warheads.

In general the model prepared by Openshaw and Steadman predicted between two and five times more casualties than the Home Office model, with the greatest differences being in blast and fall-out casualties.

The authors say: "The conservative assumptions and possible errors in the Home Office models result in greatly reduced numbers of casualties and probably explain apparent Governmental beliefs that the majority of the population of the UK would survive a large-scale nuclear attack without any need for either evacuation or public blast and fall-out shelters."

The authors' own assumptions, based on standard US assumptions, were far more gloomy and considerably more realistic. They probably represented low rather than high predictions of levels of potential casualties.

The Home Office results seemed to reflect a combination of errors in assumptions about blast casualty rates and blast range, possibly deliberately wrong fall-out dose assumptions, and possibly fraudulent target selection assumptions.

The authors say it was possible in principle that the Home Office assumptions might be more accurate than those that they themselves had adopted. If this was so, then the Home Office should bring their model out into the open and expose it to full public debate.