Variant Creutzfeldt-Jakob disease in the United Kingdom and elsewhere: situation at the end of 2005

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By the end of December 2005, a total of 159 cases of variant Creutzfeldt-Jakob disease (vCJD) had been reported in the United Kingdom, of which 153 have so far resulted in death. Elsewhere numbers remain small, with 15 cases in France, 4 in Ireland, 2 in the United States, and 1 each in Canada, Italy, Japan, the Netherlands, Portugal, Saudi Arabia and Spain [1]*.

In the UK, five deaths from vCJD were reported in 2005, four less than the previous year's total of nine. Results from modelling the incidence of deaths indicate that the current epidemic wave reached a peak of 28 deaths in 2000, and has since declined (Figure). Extrapolating this trend gives an estimate of 2 deaths in the next 12 months (95% prediction interval 0 to 5). With 6
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Patients alive at the end of 2005, however, a prediction of 2 deaths is likely to be an underestimate [2].

Figure. vCJD deaths by year, and fitted quadratic model for incidence trend.

It is important to note that, to date, all vCJD cases have been methionine homozygote at codon 129 of the prion protein gene. Preclinical vCJD infection has, however, been reported in a heterozygous patient after blood transfusion from a donor who subsequently developed vCJD [3]. Although the initial epidemic wave is now in decline, it is possible that there will be further epidemics of cases in other genetic groups. There is also the possibility of continuing person to person transmission through certain forms of health care (for instance, in relation to surgery, blood transfusion or treatment with plasma products). It is essential, therefore, to maintain and promote active surveillance of CJD to investigate these possibilities.

This article was adapted by the authors from reference 2

*Correction. When this article was published, this sentence was linked to a reference to the website for The European and Allied Countries Collaborative Study Group of CJD (EUROCJD, http://www.eurocjd.ed.ac.uk/EUROINDEX.htm, last updated 2 November 2005). The latest figures have been provided by personal communication with RG Will, National CJD Surveillance Unit, Edinburgh, UK, January 2006. This change was made on Friday 27 January.

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References:

1. Health Protection Agency. Variant Creutzfeldt-Jakob disease in the United Kingdom and elsewhere: