Rapid communications

INCREASE IN VTEC CASES IN THE SOUTH OF IRELAND: LINK TO PRIVATE WELLS?

M B O'Sullivan (margaretb.osullivan@hse.ie)¹, Patricia Garvey², M O'Riordan¹, H Coughlan¹, Paul McKeown², A Brennan¹, E McNamara³

1. Department of Public Health, Health Service Executive – South, Cork, Ireland

2. Health Protection Surveillance Centre, Dublin, Ireland

3. Public Health Laboratory, HSE Dublin Mid-Leinster, Cherry Orchard Hospital, Dublin, Ireland

High levels of verotoxigenic *Escherichia coli* (VTEC) have been recorded to date in 2008 in the Republic of Ireland. One hundred and forty-eight VTEC cases were notified up to the end of August 2008 (Figure 1), compared to 70–90 confirmed cases reported in the equivalent time period in 2006 and 2007. Thirty three percent of cases notified in Ireland in 2008 indicated that their usual drinking water supply was a private well.

In August, national attention was drawn to the concerns of investigators in the Health Service Executive (HSE) – South (counties Cork and Kerry) that most of the VTEC notifications over the summer months in that region had links to private wells. In the three-month period June–August 2008, twenty-two cases of VTEC were notified in HSE – South (Figure 2), out of a total of thirty notifications since the beginning of the year. The twenty-two cases comprised four sporadic cases and five family clusters. The household drinking water supply was from a private well in all but one sporadic case and in two cases who were part of a larger cluster (the remaining cases in that cluster had household exposure to a private well).

Investigators are concerned that exposure to private well drinking water was the primary risk factor for most of the June–August VTEC cases in HSE-South. All of the eight private wells involved were either on farms or in close proximity to farmland and livestock. Seven of those wells were found to be microbiologically contaminated. VTEC was detected in three of the wells.

Exceptionally heavy rainfall in Ireland this summer [1] resulted in unprecedented high water table levels, marked runoff and extensive flooding. As a result, the potential for microbiological contamination of drinking water was markedly increased. Private water supplies have been repeatedly highlighted as a concern in relation to VTEC infection in Ireland [2], [3], [4]. A recent *E. coli* O157 outbreak in Scotland emphasised the risks associated with private water supplies [5]. Increasing awareness among households with private water supplies has also been highlighted as an initiative to reduce livestock-associated risks of VTEC [6].

The Irish Health Protection Surveillance Centre has recently issued a press statement advising household owners with private wells of the importance of proper maintenance of private water supplies following increases in contamination [7]. Water authorities in Ireland have been advised of the current findings of the ongoing investigation of VTEC cases reported so far in 2008 and of associated public health concerns.

Acknowledgements

The authors wish to acknowledge the following: Environmental Health Officers, HSE-South; Microbiology Department, Cork University Hospital, HSE-South; Public Health Microbiology Laboratory, St Finbarr's Hospital, HSE-South.

FIGURE 1

VTEC notifications in Ireland, January – August 2008, by Health Executive Service (HSE) area (n=148)

Source: Health Protection Surveillance Centre (HPSC), Ireland, September 2008 (data provisional)

FIGURE 2

VTEC notifications in Health Service Executive – South area (Cork and Kerry counties), January – August 2008 (n=30)

Source: Department of Public Health, HSE-S, September 2008

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This article was published on 25 September 2008.

Citation style for this article: O'Sullivan MB, Garvey P, O'Riordan M, Coughlan H, McKeown P, Brennan A, McNamara E. Increase in VTEC cases in the south of Ireland: link to private wells?. *Euro Surveill.* 2008;13(39):pii=18991. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=18991>