

Verocytotoxigenic E. coli (VTEC) VTEC is a particular strain of the E. coli bacterium, which produces a toxin that results in gastroenteritis, which ranges from watery diarrhoea, to bloody diarrhoea, to serious illness.

A significant proportion of cases have no symptoms. The most severe complication, haemolytic uraemic syndrome (HUS) produces kidney failure and up to 10% of Irish cases of VTEC will develop HUS. Of those who develop HUS, as many as 2.5% to 5% of cases will be fatal making this a particularly serious disease. In addition, one quarter of children who develop VTEC-associated HUS will have lasting kidney damage.

In Ireland, the infection is most commonly associated with untreated water sources and with person to person spread. Spread may be foodborne, spread from undercooked beef being a common method of spread. Infection may also be acquired after contact with the faeces of farm animals and visiting petting farms.

Precautions: Preventive measures include care in the way food is stored, prepared, and cooked, and by attention to basic hygiene in food handlers, affected people, and those in contact with them. Strict attention to hand hygiene is essential to reduce spread. Young pupils may require supervision of hand washing after toilet use and before meals. There should be adequate cleaning of toilet facilities. See Chapter 6 for further advice.

VTEC can be associated with consumption of water from poorly maintained private water supplies. If a school's water is supplied from a private supply they should ensure the quality of this water. Staff or pupils who have had VTEC should be excluded for 48 hours after their first formed faeces. If a pupil in a primary school develops VTEC advice can be sought from the local Department of Public Health. Resources: Useful information on VTEC can be found at <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/VTEC/Guidance/>. Further information can be found in the Report of the HPSC Sub-Committee on Verocytotoxigenic E. Coli, available on the Health Protection Surveillance Centre's website at <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/VTEC/Guidance/ReportoftheHPSCSub-CommitteeonVerotoxigenicEcoli/>. Additional guidance to minimise the risk of VTEC during pet farm visits can be found on the Health Protection Surveillance Centre's website at <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/VTEC/Guidance/File,3973,en.pdf> and <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/VTEC/Guidance/>