A One Health approach to understanding the epidemiology of Cryptosporidium in Scotland

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Cryptosporidium is the most commonly reported protozoal cause of infectious intestinal disease among humans in Scotland. A One Health approach was taken to bring together human and veterinary expertise and data to achieve a better understanding of the complex epidemiology of cryptosporidium, and to demonstrate the value in this approach.

Rates of cryptosporidium vary considerably across the 14 NHS Boards, with some similarity between the human rate and herd-level cattle rates within a Board.

The spring peak of the biphasic seasonal pattern among humans is predominantly due to C. parvum. It occurs consistently four weeks after the single peak of cattle isolates associated with the spring calving period.

The strength of this approach was not only in bringing together human and animal data, but equally as important, in facilitating discussion and collaboration between the expertise in both disciplines, to ensure a common understanding of the limitations and biases of the data, and to provide a joint interpretation of the analysis.