

# facts on cryptosporidium

## what is Cryptosporidium?

Cryptosporidium is a microscopic organism which causes a type of gastro-enteritis called cryptosporidiosis in man and animals. The symptoms of illness include a watery diarrhoea, nausea, vomiting and abdominal pain. Cryptosporidiosis is normally contracted through travel abroad, contact with other people carrying the organism or when children come into contact with infected farm animals.

## where does Cryptosporidium come from?

Cryptosporidium is found in the faeces of man and other mammals. The main sources of the organism in the environment is from animal wastes from agriculture (cattle and sheep), sewage works and wildlife. Large numbers can often be found in rivers and lakes, particularly after heavy rainfall, which washes contaminated material off the land into the water.

## can Cryptosporidium occur in drinking water?

When properly treated – no. However, unlike bacteria and other disease causing organisms, Cryptosporidium survives in a special egg-like body called an oocyst, which can survive in the environment for a long

time and is more resistant to chlorine and other disinfectants used to purify drinking water.

These oocysts are effectively removed from water by other water treatment processes particularly coagulation and filtration. On very rare occasions, both in the UK and world-wide there have been outbreaks of illness due to Cryptosporidium in water supplies but these are usually associated with some form of treatment deficiency. There have been no outbreaks of cryptosporidiosis associated with drinking water supplied by Severn Trent Water.

## what is the standard for Cryptosporidium?

Regulations were introduced in 1999 which requires water companies to continuously monitor certain water treatment works for Cryptosporidium. The regulations set a treatment standard of not more than 1 Cryptosporidium oocyst in 10 litres. Severn Trent Water is required to monitor eight treatment works under the regulations and have never detected Cryptosporidium exceeding 10% of the standard at any of our water treatment works. ►

## how do we stop *Cryptosporidium* occurring in drinking water?

For Severn Trent Water, ensuring the safety of your water supply is of paramount concern. We therefore take every possible precaution to prevent *Cryptosporidium* entering the supply system. We have carried out extensive monitoring for over twelve years and are co-developers of a world-beating new technology for the detection of *Cryptosporidium*. In conjunction with the Environment Agency we monitor sources of pollution risk in our raw water. We have also undertaken extensive research and work to optimise water treatment processes at our water treatment works to ensure that the risk of occurrence of *Cryptosporidium* is as low as possible. Severn Trent Water also has close liaison with Public Health and Environmental Health officials to assess any likelihood of illness in the community being associated with the water supply.