

Epizootic Catarrhal Enteritis (ECE) in Ferrets

Drs. Foster & Smith Educational Staff

In 1993, a severe, life-threatening diarrhea was reported in ferrets that went to shows on the Atlantic coast, or were exposed to ferrets that went to the shows. Because of the character of the diarrhea, this disease became known as 'green slime disease.' Eventually, it was suspected that the cause was a coronavirus, and because of the intestinal signs, this disease was officially named ECE (epizootic catarrhal enteritis). (NOTE: Although it has never been proven, it is still thought that coronavirus plays a role in this disease.) In addition to the intestine, the disease affects the liver, as well.

It was evident, in the first year after ECE appeared, that previously healthy adult ferrets developed diarrhea when exposed to apparently normal ferrets that had recovered from the disease months earlier, suggesting that recovered ferrets may be able to transmit the disease for a long time.

The first sign of the disease may be vomiting, then greenish watery diarrhea begins, causing severe dehydration. Some ferrets may also develop bloody diarrhea. Young animals generally recover from the disease quickly, but older ferrets tend to have more severe disease. In more severe cases, most ferrets would die in a few days without adequate treatment, and some die in spite of intensive care because they are unable to digest and absorb food, or because of liver involvement or complications due to certain bacterial infections. A ferret that has watery diarrhea for more than 12 hours is at risk of fatal dehydration. Because some of these animals are so sick, home treatment is not appropriate. They must be hospitalized until the acute part of the disease is under control because they require intravenous fluids and supplemental nutrition. Some ferrets are also treated with antacids and medications to protect the intestines. Some veterinarians recommend the use of antibiotics, as well.

The lining of the small intestine is responsible for absorbing nutrients. If it is severely damaged by ECE, the ferret can become chronically unable to properly digest food. These ferrets have intermittent bouts of diarrhea, depending partly on what they eat. They need a well-balanced, easily digested [diet](#) and a constant supply of food. Nutritional supplements might be necessary for months or for the rest of the ferret's life. Some animals have eventually returned to normal; others never can eat normally and die after several months of intense effort by their owner and veterinarian.

To protect your ferret from this disease, avoid taking him anywhere there are other ferrets of unknown status. Ferret shelters have had to change their policies because they cannot tell which animals have been exposed to the disease. Those that have recovered are capable of infecting other animals for at least 6 months and probably longer. You must be careful where you buy or acquire ferrets. A perfectly well ferret can introduce ECE into a household of susceptible ferrets, causing an outbreak of diarrhea that, without proper care, can result in deaths. Veterinary care may be prolonged and costly. You will have to decide what risks you are willing to take.