What is it and what does it do?
Rotavirus is a virus that invades the cells in the intestines causing them to die and slough off. The intestine has villi which are finger like projections and they are necessary for absorption of fluid and nutrients.

As the cells die off the villi become damaged and very short, thus they no longer can absorb fluid and nutrients and scouring occurs.

The scour is usually pasty white but can have blood in it. Once all the cells have been damaged the virus generally dies out on its own and the gut starts to try and regrow but this takes time. During this time the calf is susceptible to other diseases particularly diseases involving the intestines/guts. It cannot absorb fluid and nutrients properly so the calf becomes weak and dehydrated and growth is impaired.

Often many, if not all calves will be affected and up to 20% may die. Most infections occur at 1 week of age or more, though infections have been seen as early as 1 day.

Calves are often infected at birth by contact with other infected calves or from the cow’s faeces.

Where do they get it from?
Rotavirus can remain alive in calf rearing facilities from year to year, in soil and faeces for months and in water for up to 2 weeks. It can also be transmitted by cats and dogs and other wild animals. It is fairly heat resistant but susceptible to cold. Rotavirus can be confirmed by faecal testing.

Treatment & Prevention
As with any cause of calf scours, treatment always consists of providing energy and fluids, therefore electrolyte therapy is the most important treatment, whilst maintaining milk intakes as well.

Specific treatment and prevention of rotavirus involves the feeding of antibodies against rotavirus.

This can be achieved by feeding Rotagen powder in the milk, or by feeding the antibody rich colostrum from rotavirus vaccinated animals, to calves for the first few weeks of life.

To make sure the colostrum contains the antibodies against rotavirus, ALL cows and heifers need to be vaccinated between 3 and 12 weeks prior to calving.

If you have a long calving spread vaccination may need to be done in 2 batches and is more successful if the cows have been scanned to establish accurate calving dates.
The colostrum from vaccinated cows then needs to be fed to calves for as long as possible. If you have had rotavirus scours please discuss vaccination with your vet in May/June next season to make sure your cows are vaccinated at the correct time and that you understand what needs to be done to ensure vaccination is successful.

![Image](image.png)

*The antibodies in the colostrum or milk coat the gut wall and prevent the virus from attaching.*

Bear in mind when dealing with calf scours that Rotavirus is able to infect humans so hygiene is very important.

Disinfection every day with Vetsan is recommended when an outbreak of scours is occurring, making sure that the floor, walls, calves and equipment are sprayed. Also you will need to disinfect clothing and boots between infected and non-infected pens, or if possible have a different set of overalls and boots for each.