

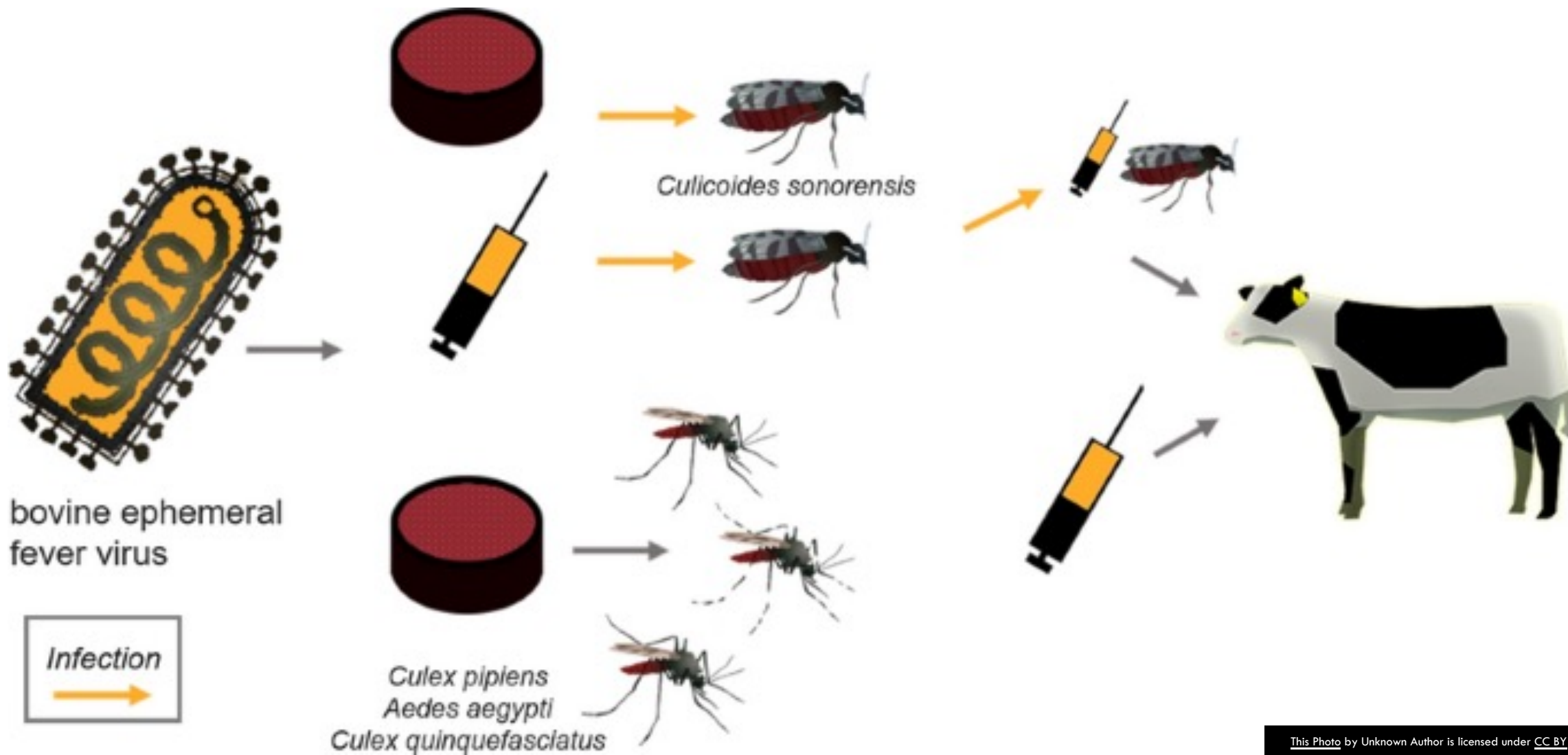
The background is a dark, textured surface with a complex pattern of splatters and dust. The colors are primarily dark blue and black, with a prominent, bright yellow-green streak running diagonally from the upper left towards the center. There are also smaller, lighter blue and greyish-white speckles scattered throughout, giving it a grainy, almost microscopic appearance.

BOVINE EPHEMERAL FEVER

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BOVINE EPIZOOTIC FEVER,
EPHEMERAL FEVER,
THREE-DAY SICKNESS,
THREE DAY FEVER,
THREE-DAY STIFFSICKNESS,
DRAGON BOAT DISEASE,
LAZY MAN'S DISEASE,
DENGUE OF CATTLE

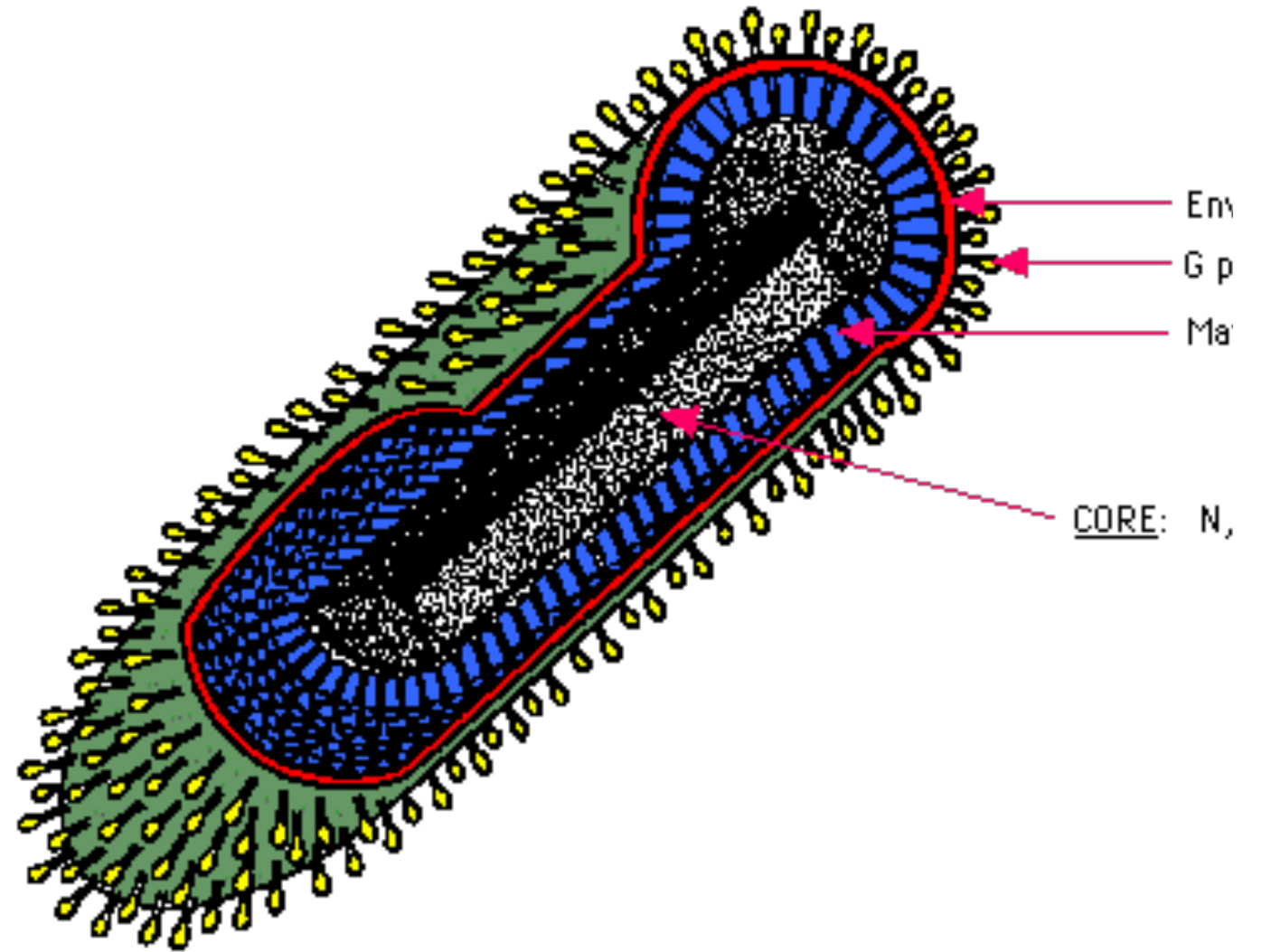


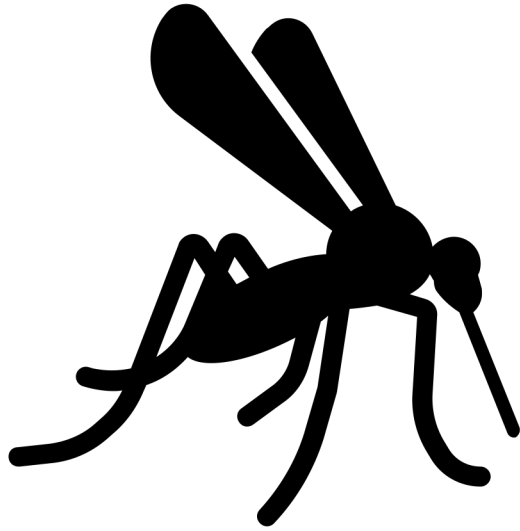
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- Viral disease of cattle and buffaloes.
 - Acute-onset fever disease caused by viruses that are transmitted by *culicoides* in cattle.
 - Economically important- decreases in milk yield
 - Lying down (3 days) with hind limbs outstretched.



ETIOLOGY

- Rabdoviridae, Ephemerovirus
- RNA
- Enveloped,
- H. A
- Only one serotype





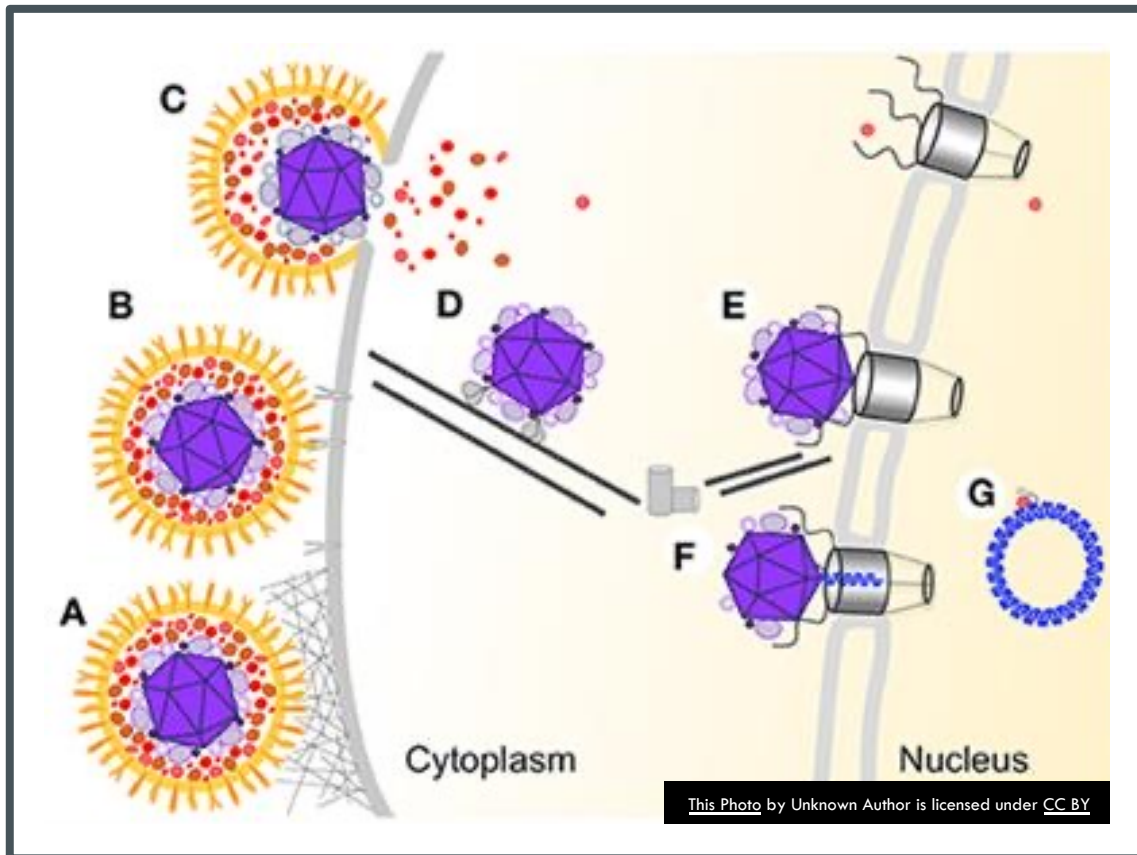
TRANSMISSION

BEFV appears to be transmitted by arthropods, but the identity of the vector or vectors is not entirely clear.

This virus has been isolated from various genera of mosquitoes, and from several *Culicoides* species

There is no evidence that bovine ephemeral fever can be transmitted directly between animals in nature; BEFV is not spread by close contact, body secretions, or aerosol droplets.

INCUBATION PERIOD



- Based on natural and experimental infections, the incubation period is thought to be 2-4 days in most cases, with a maximum of 10-11 days.

01

Small amount of fibrin-rich fluid in the pleural, peritoneal and pericardial cavities, resulting from polyserositis of the pleural, pericardial and peritoneal surfaces

02

Edema, lobular congestion and atelectasis may be apparent in the lungs

03

Serofibrinous polysynovitis (with variable amounts of yellow to brown, typically gelatinous fluid), polyarthritis, polytendinitis.

PATHOLOGY

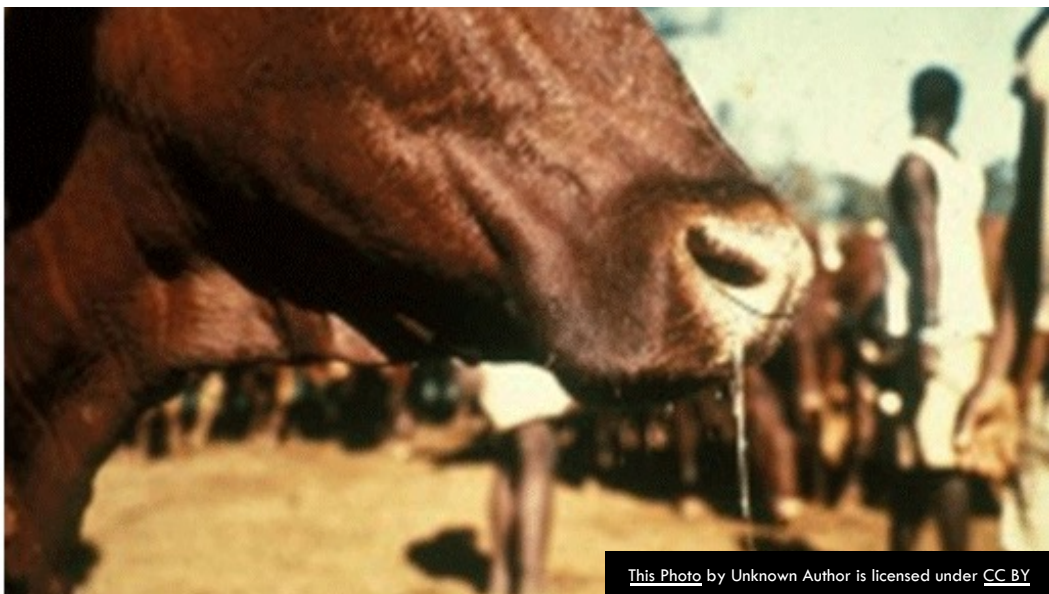
CLINICAL SIGNS

- Begins with a fever, which is often biphasic to polyphasic.
- Milk production often drops dramatically.
- Inappetence and depressed,
- Increased heart rate,
- Tachypnea,
- Serous or mucoid discharges from the nose,
- Profuse salivation,
- Muscle twitching,
- Waves of shivering and lacrimation can be seen.





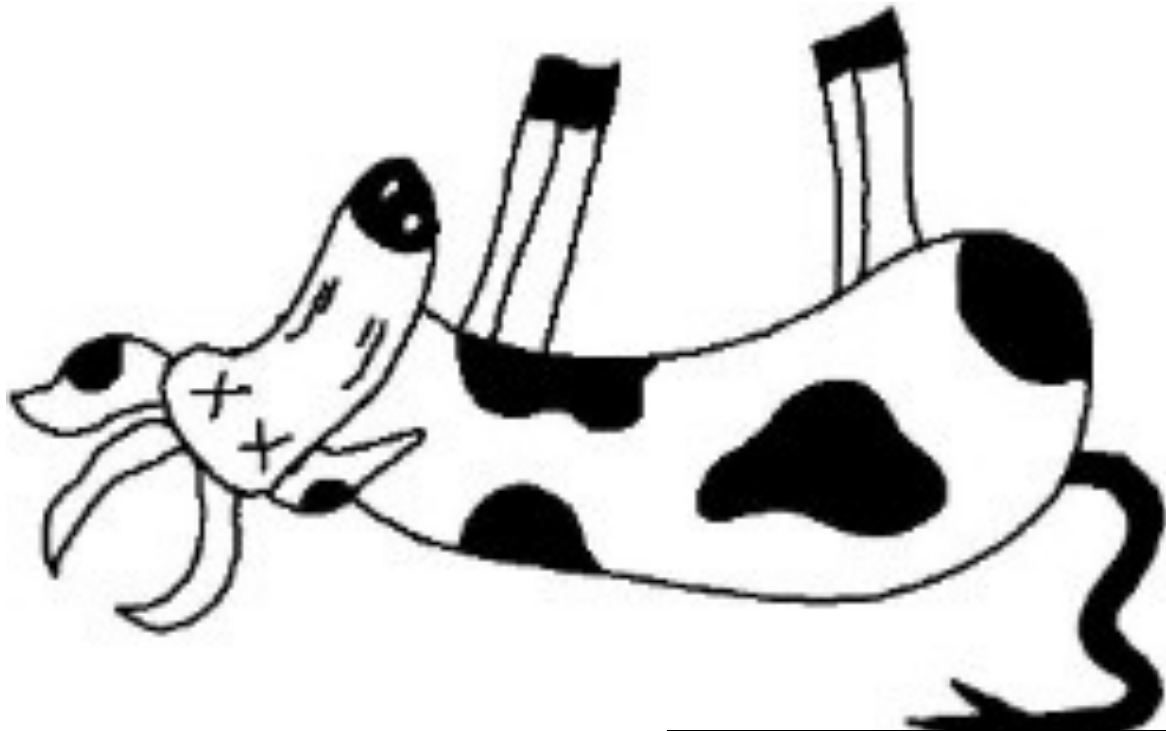
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MORTALITY RATE IS
USUALLY 1-10%



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DIAGNOSIS

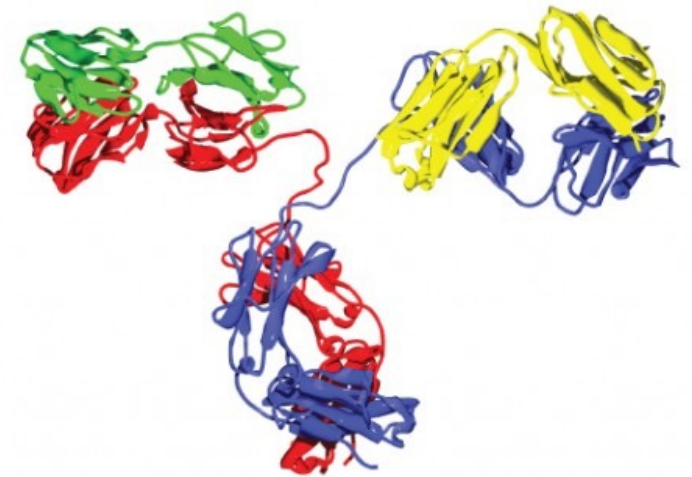
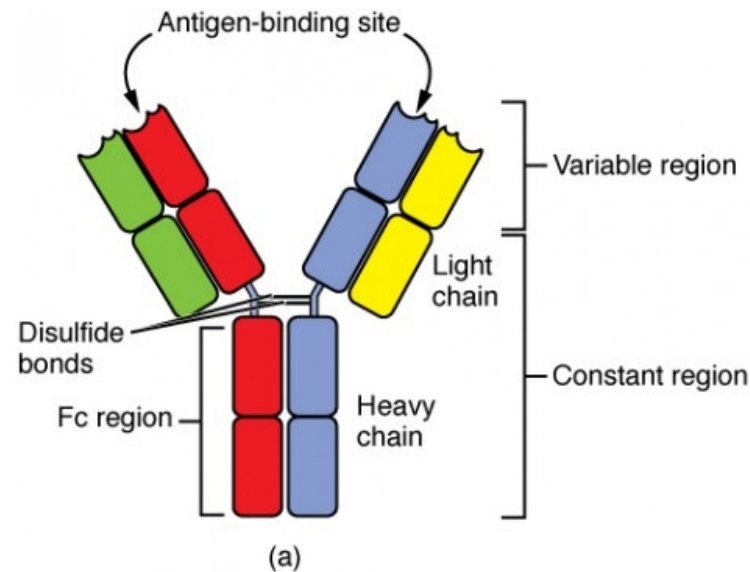
- Most animals begin to recover a day or two after the first symptoms and are fully recovered within 1-2 days.
- Animals lose condition rapidly during the illness and regain their weight slowly.



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DIAGNOSIS

- Diagnosis is generally diagnosed by PCR
- Cases can be confirmed by serology.
- A rising titer should be demonstrated, but single serum samples may be suggestive in areas where this disease does not normally occur.
- Virus neutralization or ELISA are the most used serological tests.
- IF



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PREVENTION AND CONTROL

- Most of the animals will not develop disease if re-exposed to the virus for many years or for life. However, some animals lose immunity after a few years, especially older animals.
- Culicoides control might be helpful in some situations.



VACCINATION

Vaccination is available to prevent BEF in some countries.

To achieve long lasting protection, two doses are required.

In endemic areas, vaccination is generally used to prevent disease, particularly in lactating cattle and bulls.

