

## Rinderpest:

is an acute, highly contagious, viral disease of cattle, domesticated buffalo and some species of wildlife. The classical form of rinderpest is one of the most lethal diseases of cattle, and can have a catastrophic effect on naïve herds.



## **Etiology:**

Rinderpest virus (RPV), a member of the genus [Morbillivirus](#), is closely related to the [measles](#) and [canine distemper](#) viruses. Like other members of the [Paramyxoviridae](#) family, it produces enveloped virions, single-stranded [RNA virus](#). The virus was particularly fragile and is quickly inactivated by heat, [desiccation](#) and sunlight.

## Transmission

Transmission of rinder pest virus usually occurs through direct or close indirect contact with infected animals. Small amounts of virus can be found in nasal and ocular secretions, saliva, milk, urine and feces beginning 1 to 2 days before the onset of fever. Blood and all tissues are also infectious before the clinical signs appear.

when the humidity is very high. Infected animals do not become carriers; the virus maintains itself by passing from animal to animal in a large, susceptible population. Vertical transmission does not occur.

اعزائي الطلبة في هذا السلايد  
سؤال مهم حول طرق انتقال الفيروس بواسطة التلامس للإفرازات الحيوان المصاب الموجوده بالفم و  
العين فتره الحضانه سريعه جدا تصل 1-2 يوم  
تلعب الرطوبه دور مهم في نقل الاصابه بالاضافه الى الازدحام الشديد في القطيع  
انتقال المرض افقيا وليس عمودي

## Post Mortem Lesions :

In the classical form of rinder pest, the carcass is often dehydrated and emaciated, and shows evidence of diarrhea and mucopurulent nasal discharges. The eyes may be sunken. Depending on the stage of the disease and strain of the virus, congestion, pinhead or larger gray necrotic foci, or **extensive necrosis and erosions may be seen in the oral cavity**. Necrotic areas are sharply demarcated from healthy mucosa.

من اهم الاسئلة تشريح المرضي لطاعون البقري  
وتبدأ بحالة الجفاف الشديد وطروحات انفية مخاطية والعين الغائره تنخر مختلفة الاحجام تتحد مكونه وهي تقرح  
الفم

The necrotic lesions extend to the soft palate, pharynx and upper esophagus. Necrotic plaques are occasionally found on the pillars of the rumen, but other areas of the rumen and reticulum are usually unaffected.

التقرحات لا توجد في الشبكية ضمن اجزاء الكرش

erosions and hemorrhages may be seen in the omasum. Severe congestion, petechiation and edema may be found in the abomasum, particularly in the pyloric region. White necrotic foci may be seen in Peyer's patches; necrosis, erosions and sloughing can be seen in the adjacent areas. The small intestine is otherwise unaffected. In the large intestine, blood and blood clots may be found in the lumen, and edema

ايضا بالتشريح المرضي ممكن نشاهد  
تقرحات مع نزوفات في omasum وممكن مشاهدة مناطق متنخره

erosions and congestion may be seen in the walls, particularly in the upper colon. The ileocecal valve, cecal tonsil and crests of the longitudinal folds of the cecal, colonic and rectal mucosae can be greatly congested in animals that die acutely, and may be darkened in more chronic cases, a lesion known as ‘tiger striping’ or ‘zebra striping’. (Tiger striping) can also occur in other diarrheas, and is probably caused by tenesmus.)

اهم صفة تشريحية للمرض خطوط نزفية في الامعاء تشبه خطوط حمار الوحشي

# Differential diagnosis

In cattle, the differential diagnosis includes bovine virus diarrhoea (mucosal disease), infectious bovine rhinotracheitis, malignant catarrhal fever, foot-and-mouth disease, vesicular stomatitis, salmonellosis, necrobacillosis, paratuberculosis, bovine papular stomatitis, contagious bovine pleuropneumonia, East Coast fever and arsenic poisoning. In sheep and goats, rinderpest must be distinguished from peste des petits ruminants