

## CONTAGIOUS ECTHYMA



This disease  
is known to  
occur in  
Afghanistan.



### 1. Definition

Contagious ecthyma (Orf, Sore Mouth) is an infectious dermatitis of sheep and goats causing sores primarily on the lips of young animals. The disease is usually more severe in goats than sheep

### 2. Etiology

The causative agent, contagious ecthyma virus, is in the Genus *Parapoxvirus* in the Family Poxviridae.

### 3. Transmission

Infection occurs by contact with carriers, infected animals, or fomites. The virus is highly resistant to desiccation and survives in the crust for years. The virus has reportedly been recovered from dried crust after 12 years. Animals feeding on acidic garbage or on very rough materials are especially susceptible to inoculation because of mucosal erosions.

### 4. Species affected

Sheep and goats are the primary affected species. This disease is found worldwide and may occur in young lambs and kids in early spring and occasionally in mature animals that do not acquire immunity from natural exposure.

Humans are occasionally affected with blisters on their hand after handling lesions of affected animals.

Contagious ecthyma can infect humans!

## **5. Clinical signs**

The primary lesion develops on the skin of lips and frequently in the corner of the mouth and on the ears. Lesions are occasionally found in between the digits of the feet, and around the coronary band. Sheep and goats nursing young lambs or kids may develop lesions on the teats. The lesions develop as papules and progress to vesicular and pustular stage before forming proliferative crusts and scabs.

After about 1 to 4 weeks, the scabs drop off and tissues heal without scarring. During active stages of infection, more severely infected animals fail to eat and lose weight, especially if secondary infections have taken place. Extensive lesions on the feet may lead to lameness. Animals with lesions on the teat may develop mastitis.

## **6. Pathologic findings**

Animals do not usually die from sore mouth, except for very young animals that are too sore to suckle. The skin lesions are as described under clinical signs.

## **7. Diagnosis**

The lesions of sore mouth are characteristic in their distribution and age susceptibility. Definitive diagnosis can be done in the laboratory through histopathology, electron microscopy, or viral isolation.

## **8. Treatment**

The disease is usually self-limiting and affected animals do not need any treatment. Severely affected lambs and kids should receive supportive therapy if they are not able to nurse or eat. Antibacterials such as

penicillin and oxytetracycline may be indicated in severe case to combat secondary bacterial infection.

### **9. Prevention and control**

Animals that have recovered from natural infection develop immunity and are highly resistant to re-infection.

There is a live vaccine available in some countries that produces fair immunity. However, vaccines should be used cautiously to avoid contaminating uninfected premises. Vaccinated animals should be segregated until the scabs have fallen off. Vaccination for sore mouth is not indicated unless the disease exists in a herd. Vaccination is not practiced in Afghanistan.

Persons handling affected animals with active lesion around the mouth should use reasonable protective precautions such as wearing gloves.



Sore Mouth papule on the finger  
of a person



Sore Mouth scabs on the lip