

SHOULD I BE CONCERNED ABOUT SORE MOUTH?

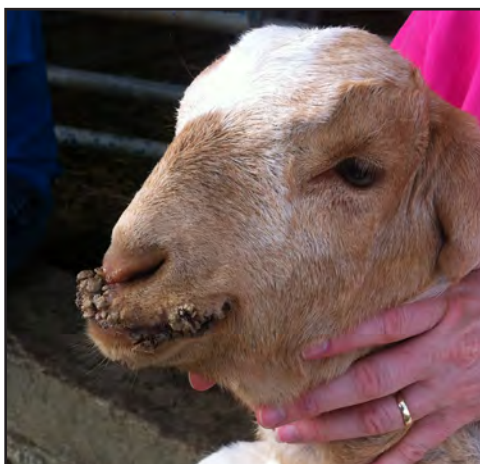
by Dr. Beth Johnson, Kentucky of Agriculture's State Veterinary Services

Contagious ecthyma, commonly referred to as soremouth or "orf", is a highly contagious, zoonotic disease affecting small ruminants such as sheep and goats. It is caused by a poxvirus and can persist in the environment for a long time in the scabs that drop off once the animal heals. Clinical signs of this disease include vesicular formation progressing to pustules followed by scab formation on the lips, nostrils, face, eyelids, teats, udders and feet of infected sheep and goats.

Young animals seem to be more susceptible to soremouth since many older animals have already been exposed, became infected, then recovered. Once an animal recovers from soremouth it appears that they acquire lifelong immunity. Depending on the severity of the lesions, reduced weight gain, feed efficiency and mastitis are some of the side effects of this disease. Problems arise when adult ewes/does which have never been exposed develop lesions on their udder and teats, usually from their offspring that have mouth lesions. If very severe, a kid/lamb may not want to nurse or the dam may have teat lesions so severe that she won't allow nursing and the offspring may die from starvation. **Photo A** demonstrates a young kid with soremouth lesions.

Some sources for introduction of soremouth into a naïve herd include stalling in pens at a show where infected animals are or have been, purchasing animals from a herd or livestock market where active infection was present, biosecurity breakdown (no change of clothes/footwear after visiting another farm/livestock market, lack of quarantining new purchases). Within an infected herd, feeders are a common source of infection.

When a sheep or goat becomes infected, it takes 2-3 days after exposure for a vesicle or pustule to form followed by a scab. Scabs are usually present for 2-3 weeks, heal and then drop off and exist in the environment for a long period of time as a future source of infection. Since soremouth is caused by a virus, treatment is aimed towards preventing secondary infection such as severe inflammation and mastitis. A broad spectrum antibiotic ointment or strong



A: Soremouth lesion on a young kid.



B: An Orf lesion on a human finger.



C: Interdigital Lesion complicated by contagious ecthyma.

iodine can be applied to the lesion to prevent secondary bacterial infection. If infection is severe, systemic antibiotics should be administered to help the affected animal to recover more quickly. As with all disease, consult your local veterinarian for advice regarding treatment, prevention and control.

When considering prevention, many

producers elect to vaccinate their young lambs or kids against soremouth. The vaccine is a **live** virus so if soremouth is not present on a farm it is very important not to introduce it by vaccinating. A small drop of reconstituted vaccine is applied to an area of skin without hair or wool that has been slightly scratched. The virus enters the skin through these small cuts or abrasions. Vaccinated animals experience a small lesion in this area which heals and provides protection against future exposure. Locations that have been utilized for vaccination are the inside of the ear, tail web, inguinal area, etc. As can be seen by the severe interdigital lesion pictured in **Photo B**, kids with soremouth lesions will chew on other areas of their body causing lesions elsewhere.

Another important aspect of this disease is the potential for human infection. Soremouth is a zoonotic disease. As pictured in **Photo C**, humans develop a nonhealing lesion which may take 2-3 months to heal. In today's society, another concern is secondary infection with MRSA resulting in a life threatening event. It is extremely important that humans wear protective gloves and clothing when handling infected animals. Don't be like the producer in **Photo B!** Be sure to wash any exposed areas thoroughly after handling animals. As with animals, there appears to be lifelong immunity in humans that had a lesion. Be sure to contact a health professional if you suspect that you have a lesion and let them know that you have handled animals with this virus.

Always remember as an ethical owner/producer you should feel obligated to reduce the risk of spreading this disease to other producers. If you have show animals with soremouth, do not bring them to the shows until completely healed, otherwise they will be disqualified and sent home. They will be disqualified and sent home. It is a reportable disease in Kentucky and infected animals should not be brought to livestock sales exposing other animals at the sale.

Dr. Beth Johnson is a Staff Veterinarian in the Kentucky Department of Agriculture and has 40 years of experience raising and treating small ruminants. Her family farms in Parksville, KY where she raises Gelbvieh cattle and Boer goats.