

Cache Valley Virus

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Cause for Concern

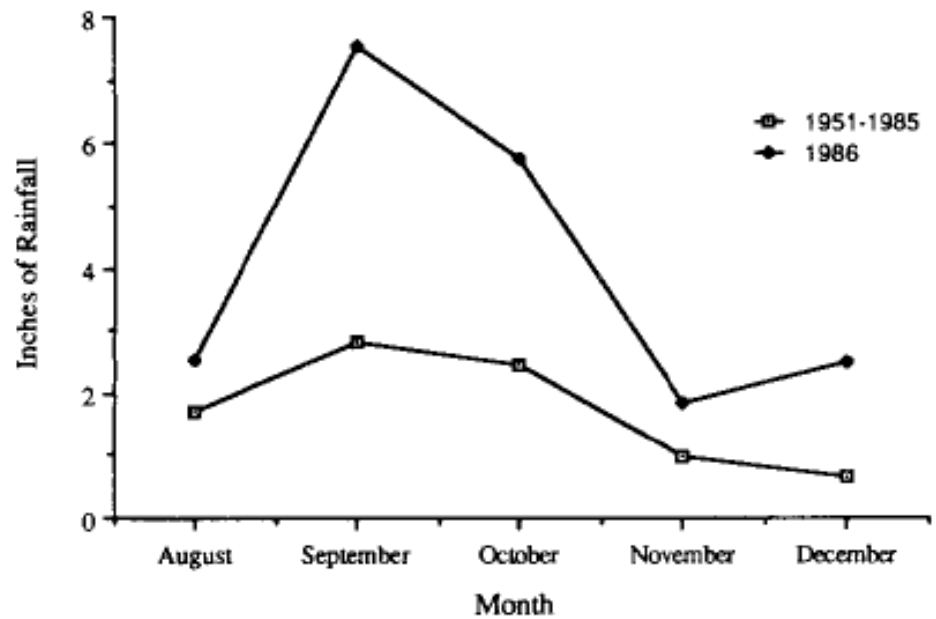
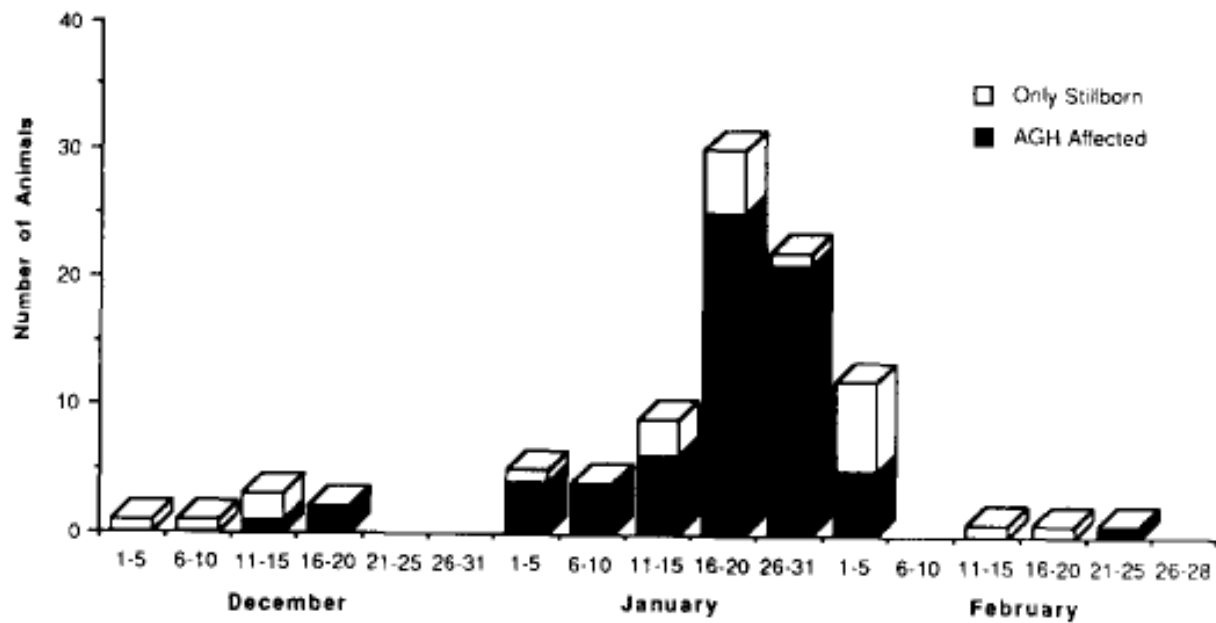
- North Dakota
 - 2 highly probably reports
 - Tappen, Wimbeldon
 - 1 Producer 5% lamb crop
- Texas
 - 90% Death Loss



History

- Cache Valley, Utah (1956)
- San Angelo, Texas
 - 20% seropositive for CVV (1981)
 - Research Trial (1986)
 - 20% affected lambs
 - 25% neonatal loss





What is it?

- Virus (Bunyaviridae family)
 - Similar to Blue Tongue, Rift Valley, & Akabane
- Anthropod-borne disease
 - Most likely mosquitos
- Known Hosts
 - humans, horses, and ruminants
 - foxes, raccoons, pigs
- Overwinter



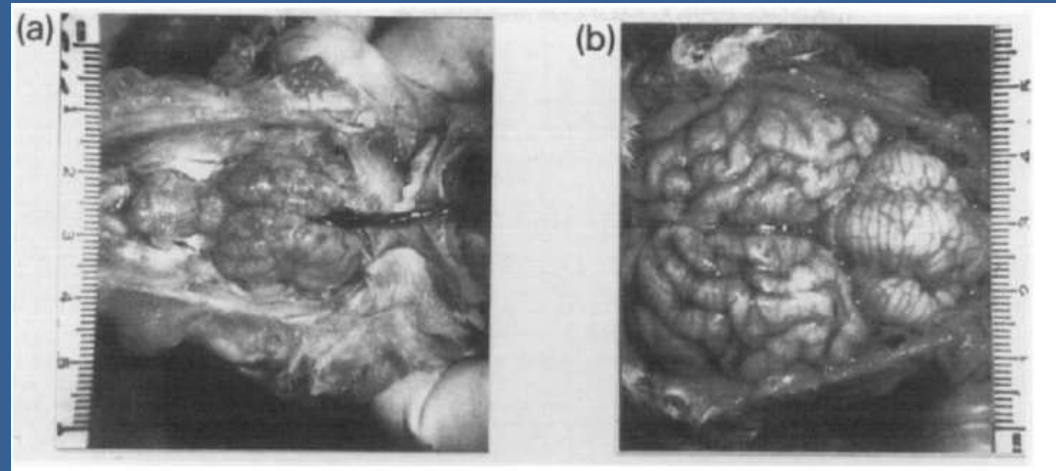
Timing of Infection

Gestational Infection

- < 28 d = embryonic death
- 28 – 35 d = severe abnormalities in CNS
- 35 – 45 d = less severe, weak lambs
- > 45 d = no adverse effect

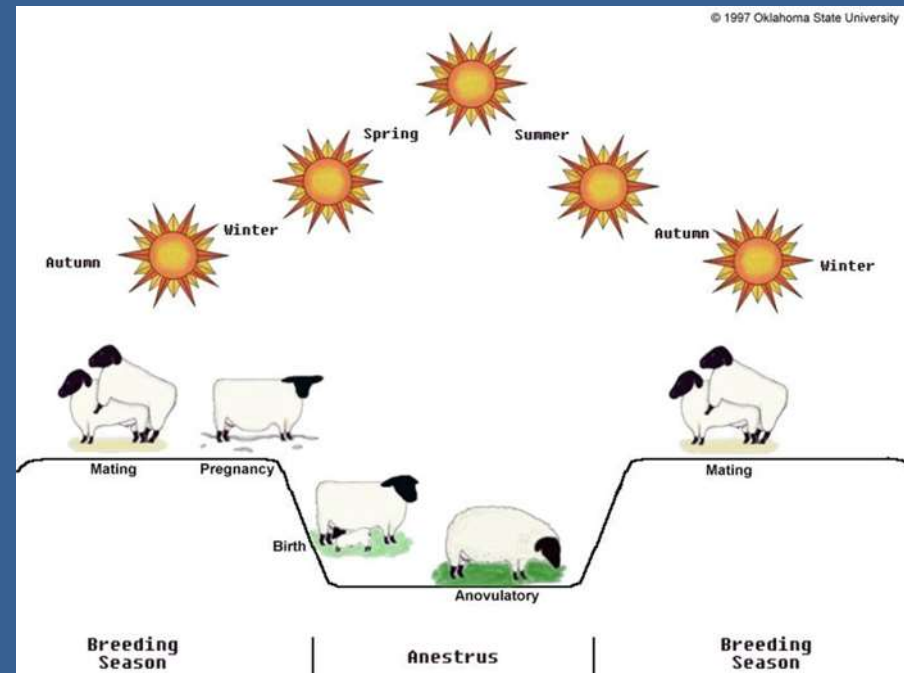
Clinical Signs

- Signs
 - Abortions
 - Dystocia
 - Weak Lambs
 - Stillbirths
- Congenital Defects
 - Arthrogryposis hydrencephaly (AGH)
 - Poor muscle development
 - Twisted backs
 - Rigid legs
 - Shortened jaw



Who is most susceptible?

- Naïve Sheep
 - Ewe Lambs
 - Western Ewes
 - New Wet Lands
- Breeding Season
 - Summer
 - Spring???



What to do?

- Treatment
 - none



- Prevention
 - No available vaccine
 - Alter breeding season
 - Avoid Wet Pastures
 - Control Mosquitos
 - Insecticides
 - Permethrins
 - Spray
 - Ear Tag

Other Species???

- Beef Cattle
 - January Calving (KS)
 - AGH
 - Low fertility Rate
 - 2009 & 2010
 - Serological (2002)
 - ~50% positive
 - ND, SD, MN
- Humans
 - NC, 1995
 - Death after complication
 - WI, 2003
 - Normal Recovery
 - Evidence to suggest likely correlation of seropositive, congenital defects, and timing of first trimester of pregnancy (CDC, 1995)

Questions

