



Pneumonia in Bighorn Sheep

Background

Pneumonia is a bacterial respiratory disease observed in bighorn sheep (BHS). It is thought that BHS can contract the disease through direct contact with domestic livestock. The bacterial agents responsible are *Manheimia hemolytica* and *Mycoplasma ovipneumoniae*. Both have been isolated from BHS in Arizona. Several states have reported severe losses in bighorn sheep populations with the disease.

The amount of infection can vary within a herd and can cause mortality in more than 90% of the animals. Animals that do not die may become carriers, putting naïve lambs at risk. In these cases, the number of lambs that reach adulthood is reduced such that the overall herd size declines for several years. Signs include: paroxysmal coughing, nasal discharge, head shaking, drooping ears, fever, and lethargy.

Management

State wildlife managers, federal officials, and BHS advocates emphasize the need to reduce contact between wild and domestic sheep species, citing evidence of disease transfer. This is often difficult because many BHS populations occur on public land where domestic sheep are permitted to graze. Bighorn sheep exhibit “foray” behavior, where individuals travel up to 50-km searching for food, water, or other herds. This increases the likelihood of wild sheep encountering domestic sheep. Separating domestic and wild sheep is the most viable current management option available to wildlife managers. AGFD actively works with ranchers and National Forest managers to minimize contact between domestic livestock and bighorn sheep.

The Arizona Game and Fish Department (AGFD) considers pneumonia to be a serious potential threat to BHS herds and closely monitors known BHS herds for signs of pneumonia. Whenever possible, BHS will be tested for pneumonia by taking nasal swabs from live animals, or asking hunters to submit nasal swabs and nasal tissue for subsequent testing. The public can assist by reporting sick or dead sheep to the Department, the Wildlife Health Program, or to local regional offices.

- Humans cannot contract pneumonia from infected sheep.

Reporting

To report dead wildlife, please call the Wildlife Disease Hotline at 877-972-8426. Wildlife health personnel will respond Monday through Friday during normal business hours. You can leave a message if it is before or after business hours. Fresh samples are required for testing. If you have a wildlife related emergency, please call our 24 hour dispatch center at (623) 236-7201. If the animal you are calling about has been shot and you are reporting possible illegal activity, call Operation Game Thief: 800-352-0700.

azgfd.gov | 602.942.3000

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