

VOLCANIC ASH INFORMATION 7

Prepared by Oregon State University's Agricultural Experiment Station and Extension Service. For more information, consult the OSU Extension Service in your county or the nearest branch Agricultural Experiment Station.

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VOLCANIC ASH AND ANIMAL HEALTH CONCERNS

Having an active volcano in your backyard is a new experience for people in the Pacific Northwest and periodic dusting with volcanic ash may be anticipated for an unknown period of time. This is causing much consternation and many problems for both people and animal residents of a wide area.

After the initial explosion much concern was expressed for the possible acute toxic effects on man and on domestic animals. Many laboratories obtained specimens of the material, processed the ash, and reported results according to the scientific discipline they represent. These reports have tended to allay fears of severe toxicity resulting from the chemicals in volcanic ash.

Rats fed the material were very tolerant to the ingested volcanic ash. The levels they consumed were equivalent to feeding a 1,000 pound cow 5 pounds or a person 20 tablespoons daily. Baby chicks were fed the volcanic ash at levels up to 30 percent of their diet, with no adverse effects noted after eating this material for 30 days.

The physical presence of ash can cover feed sources and pollute open water supplies. It was noticed that animals were reluctant to drink ash polluted water, but drank freely when offered clean water. When desirable pasture plants were covered with ash, it was observed that some sheep died as a result of grazing toxic plants.

Dust particles of any type cause irritation of the respiratory tract. The severity of a respiratory problem depends

on the length of exposure, concentration of dust, and dust particle size. Animals with existing lung damage may experience severe respiratory distress and pneumonia or emphysema may follow inhalation of volcanic ash.

Remove animals from dust exposure where possible by confining, hand feed and wet down the feed if it was exposed to dust. Should signs of respiratory distress continue or worsen consult a veterinarian for treatment.

Horses are particularly susceptible to lung disease due to inhalation of dust. Keep them under shelter during heavy ash fallout and do not exercise horses or other animals under severe dusty conditions.

Recommendations to reduce animal health problems:

Provide adequate feed when normal pasture grasses are covered with dust.

Wetting dusty hay or grain at the time of feeding will reduce the amount of dust particles inhaled.

Provide adequate fresh water for livestock use.

Confine livestock (especially horses) under shelter as much as possible during heavy ash fallout periods.

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