

eXtension

## **Botulism in Poultry**

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**Botulism** is poisoning that results from a **neurotoxin** produced by the bacterium *Clostridium* botulinum, which exists in spoiled food. Botulism is also referred to as limberneck, bulbar paralysis, western duck sickness, and alkali disease. Fowl of any age, humans, and other animals are highly susceptible to this toxin. The turkey vulture is the only animal host known to be resistant to the disease.

Botulism is not spread from bird to bird. Birds can get botulism when they eat spoiled feed or infected carcasses or maggots that have been in infected carcasses. Botulism is common in wild ducks and is a frequent killer of waterfowl because the bacteria multiply in dead fish and decaying vegetation along shorelines.

## **Clinical Signs**

Paralysis is the most common clinical sign, and it can appear within a few hours after poisoned food is eaten. A bird's legs and wings become paralyzed, and then the neck becomes limp. Neck feathers become loose in the follicle and can be easily plucked. If a bird consumes a lethal amount of toxin, prostration and death can follow in 12 to 24 hours. Fowl that consume a less-than-lethal dose become dull and sleepy.

## **Treatment**

When birds eat spoiled food, flush the flock with Epsom salts (1 lb. per 1000 hens) in water or wet mash. It has been reported that potassium permanganate in drinking water, in a ratio of one part potassium permanganate to 3000 parts water, can counteract botulism. Affected birds can be treated with botulism antitoxin injections, if available.

## **Prevention and Control**

Remove spoiled feed or decaying matter, and replace any feed you suspect of having spoiled. Incinerate or bury dead birds promptly. Do not feed birds spoiled canned vegetables. Control flies.