



Kenya Climate Smart  
Agriculture Project

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# How to Identify and Control Common Diseases in Ducks and Turkey

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## How to Identify and Control Common Diseases in Ducks and Turkeys

Ducks and turkeys are common poultry kept by many smallholder farmers for meat and eggs. They suffer from many diseases which cause death.

### A. Common turkey Diseases, symptoms and their control

#### Newcastle disease (ND)



*Newcastle disease infected turkey with swollen head*

Sick turkeys have difficulty walking, head shaking, severe swelling of the head and breathing difficulty.

#### Control of Newcastle disease

- Vaccinate young turkeys at one day old, repeat at 9 and 15 weeks of age, thereafter repeat every 3-4 months using the oral or eyedrop vaccination method.



*Vaccinating a turkey against Newcastle disease*

### **1. Fowl pox**

Fowl pox is a slow spreading viral disease which occurs as raised swellings on the skin of the head, neck, legs and feet (dry pox). It affects birds of all ages and can occur anytime of the year. It may cause blindness in severe cases warts appear in the mouth and throat and this prevent them from eating.



*Nodular swellings on the neck and face of a turkey infected with fowl pox*

### **Control of Fowl pox in turkeys**

Vaccination of young turkeys is done at 8 weeks of age through the wing-web stab. In high-risk areas, turkeys can be vaccinated at one day old.

- How to vaccinate turkeys against fowl pox
  - Mix 1 vial of vaccine with 1 vial of diluent
  - Remove the aluminium seal and rubber stopper from the vaccine and diluent vials.
  - Pour one half of diluent into the vaccine vial.
  - Replace stopper and shake gently to dissolve content.
  - Pour all contents into diluent vial, replace diluent stopper and mix gently.
  - Hold individual birds with the wing spread out and underside facing up.
  - Dip the both needles of the vaccinator into the mixed vaccine to wet them.

- Stick the needles through the web of the wing avoiding blood vessels.
- Do not allow the needle to touch the feathers, face and skin of the bird except at inoculation site.

NB: Fowl pox vaccination should be done by a veterinarian.

- There is no treatment for infected turkeys
- Farmers are advised to:
  - Treat wet wounds with iodine or another antiseptic
  - Put antibiotics in drinking water to treat bacterial infections in sick chicken
  - Apply petroleum jelly to soften scabbed wounds.

## 2. Blackhead disease (Histomoniasis)

It is a parasitic disease of turkeys. Affected turkeys have yellow diarrhoea, weakness and a blackish sickly-looking head.



*A Turkey with blackhead disease showing blackening of the head*

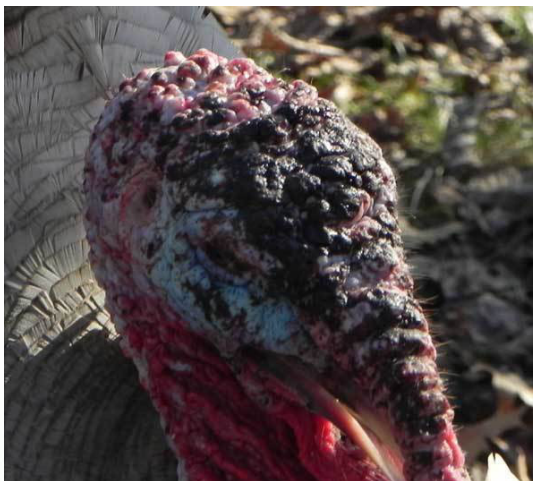
Blackhead disease causes death of 70-100% of affected young turkeys. Turkeys get the disease after eating or drinking feed or water contaminated.

### **Control of blackhead disease**

- Separate sick birds from the rest of the flock
- Separate turkeys from chicken or other poultry as they may be the source of infection
- There is no treatment for blackhead but antibiotics are given to treat opportunistic bacterial infections.

### **3. Turkey coronavirus (Blue comb disease)**

This is a highly contagious disease of turkeys affecting the gut. Sick turkeys have darkened skin over their head causing it to appear wrinkle. It mainly affects young turkeys within their first weeks of age.



*A turkey with turkey coronavirus disease having darkened skin above the head*

Sick turkeys are depressed, refuse to eat, and produce watery diarrhoea. Turkeys get the disease through contact with contaminated feed and water, direct contact with infected turkeys.

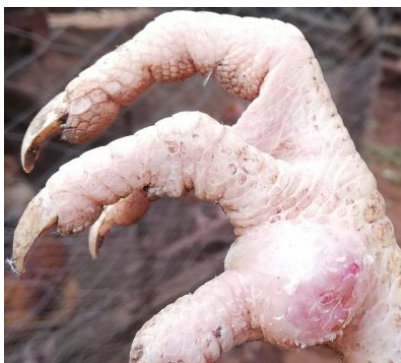
### Control of the disease

The disease has no cure

- Antibiotics are used to treat opportunistic bacterial infections.
- Restrict entry of people, vehicles and equipment to prevent introduction of disease.
- Avoid overcrowding of turkeys.
- Ensure regular and thorough cleaning of poultry house.

#### 4. Synovitis

It is a highly contagious bacterial disease that affects the breathing system of turkeys. It also affects joints and legs. Sick turkeys are lame and have abnormal swellings on the legs.



*Signs of synovitis in turkeys with swelling of in the limbs*

## Control of synovitis

- Ensure that you buy turkeys from known disease-free farms.
- Treat sick turkeys with antibiotics to reduce severity of joint infection.

## B. Common duck diseases, symptoms and their control

### Botulism (Limberneck disease)

This is a bacterial disease caused by toxins which cause limpness of the neck and eyelid. Ducks also have diarrhoea and die in large numbers. Ducks get infected through eating and drinking contaminated feed and water.



*Signs of limberneck disease showing neck paralysis and death in ducks*

### Control of botulism in ducks

- Separate the infected ducks from healthy ones
- Provide clean drinking water for the duck.
- Treat ducks with antitoxins if the disease is not severe.
- Bury or burn carcasses of ducks to limit disease spread.
- Drain all shallow waters in the environment that can breed botulism.

## Duck viral enteritis (duck plague)

It is a highly infectious disease of ducks that cause high deaths. Ducks get sick after contact with contaminated water. Sick ducks are weak, dehydrated, have difficulty walking and bloody diarrhoea.



*Signs of duck viral hepatitis showing bloody diarrhoea, difficulty in walking, vent soiled with bloody diarrhoea*

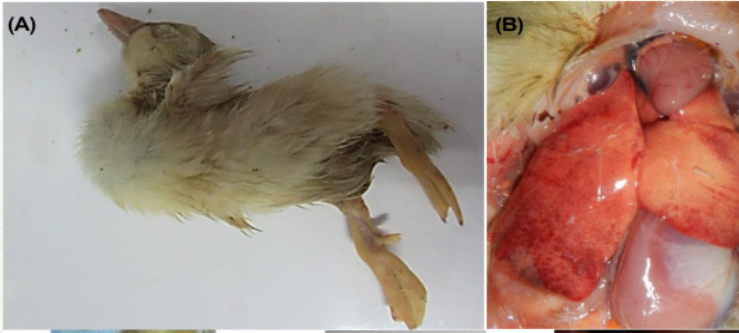
## Control of duck viral enteritis

There is no treatment for the disease but a vaccine is available for control of the disease.

- Vaccinate ducks when 8-12 weeks old.
- Provide clean water
- Ensure regular cleaning of the compound

## Duck viral hepatitis

It is a highly infectious disease of ducks that damages the liver and causes death. It mainly affects ducklings less than 7 weeks of age. Sick ducks become weak, have swollen heads and neck. Ducklings fall on the side, paddle their legs, have difficulty breathing and die within minutes.



*Signs of duck viral hepatitis including death and liver damage in ducklings*

### **Control of viral hepatitis**

There is no treatment for the disease but a vaccine is available.

- Vaccinate ducks at 16, 20 and 24 weeks of age and repeat after every 4 months.
- Ensure regular cleaning of the compound

### **Duck cholera**



*Symptoms of duck cholera showing greenish diarrhoea and lameness*

It is a severe and highly infectious bacterial disease of ducks. Sick ducks produce mucus secretion from the mouth. Their diarrhoea is greenish and foul-smelling. Ducks become lame and have difficulty in breathing. Ducks get infected through contaminated feed and water.

### **Control of duck cholera**

- Vaccinate ducks using a Cholera vaccine at 3-4 weeks of age, A booster vaccine is given after 10 days
- Treat sick ducks using antibiotics such as ESB and other sulphonamides
- Provide clean safe drinking water
- Separate sick ducks from healthy ones
- Clean and disinfect the floor and walls of the shed.

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**KCSAP**



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