

Common Diseases of Domestic Rabbits

Disease and Symptoms	Cause	Treatment & Control
<u>Skin</u>		
<i>Ear Mange or Canker</i> - Shaking of head, scratching of ears. Brown, scaly crusts at base of inner ear.	Ear Mites	Remove scales and crusts from inner ear and swab with Tr. 1 or 2. Treat all animals near or adjacent to infected animals. Treat all newly introduced animals.
<i>Skin Mange</i> - Reddened, scaly skin, intense itching and scratching, some fur loss.	Mites	Dust animals with Tr. 3 or any other small-animal dusting powder for external parasites.
<i>Favus or Ringworm</i> - Circular patches of scaly skin with red, elevated crusts. Usually starts on head. Fur may break off or fall off.	Fungus	Individual animals may be treated with Tr. 4 or 5. Dusting sulfur added to all nest boxes may help prevent spread to young. Infection can be spread to man.
<i>Sore Hocks</i> - Bruised, infected or abscessed areas on hocks. May be found on front feet in severe cases. Animal shifts weight to front feet to help hocks.	Bruised or chafed areas become infected - caused by wet floors, irritation from wire, or nervous "stompers."	Small lesions may be helped by placing animals on lath platform or on ground. Advanced cases are best culled. Medication is temporarily affective.
<i>Warbles</i> - Irritated, raised area under the skin, usually back or flanks. Active larvae can be felt under skin, area usually moist.	Infestation of skin by larval stages of the bot fly.	Drop chloroform on larvae and remove with forceps. Apply milk antiseptic to wound. Specific fly not found widely throughout US.
<i>Lymphadenitis</i> - Multiple abscesses or lesions under the skin or in the lymph glands. Loss of appetite and weight. May become generalized bloodstream infection.	Pus forming bacteria.	Individual animals may be treated with Tr. 6. Disinfect nest boxes. Destroy severely affected animals.
<u>Mucous Membranes</u>		
<i>Urine-Hutch Burn</i> - Inflammation of external sex organs and anus. Area may form crusts and bleed and if severely infected, pus will be produced.	Bacterial infection of the membranes	Keep hutch floors clean and dry. Pay particular attention to corners where animals urinate. Daily applications of lanolin may be of benefit.

Spirochetosis or Vent Disease - Similar lesions as produced by urine or hutch burn. Raw lesions or scabs appear on sex organs transmitted by mating.

Conjunctivitis or Weepy Eye - Inflammation of the eyelids; discharge may be thin and watery or thick and purulent. Fur around the eye may become wet and matted.

Infected Nose - Inflammation or swelling with cracking and chapping of the nose and lips. Sometimes brown scabs mat up to considerable thickness on the nose.

Milk Glands

Caked Breasts - Breasts become firm and congested, later hard knots form at sides of nipples. Knots may break open showing dried milk.

Mastitis or Blue Breasts - Breasts become feverish and pink, nipples red and dark. Temperature above normal, appetite poor, breasts turn black and purplish.

Respiratory System

Snuffles or Cold - Sneezing, rubbing nose, nasal discharge may be thick or thin. Mats fur on inside front feet. May develop into pneumonia, usually chronic type of infection.

Pneumonia - Labored breathing with nose held high, bluish color to eyes and ears. Lungs show congestion, red mottled, moist, may be filled with pus. Often secondary to enteritis.

Spirochete.

Bacterial infection of the eyelids; also may be due to irritation from smoke, dust, sprays or fumes.

Bacterial infection of nose and lips, similar to hutch or urine burn.

Milk not drawn from glands as fast as formed, because of too few young, or young not nursing sufficiently. Usually a management problem with high milk producing does.

Bacterial infection of the breasts.

Bacterial infection of nasal sinuses.

Bacterial infection of the lungs.

Treat animals with Tr. 8. Do not breed until lesions heal. If only a few animals are infected, it is easier to cull than treat. Do not loan bucks.

Early cases may be cleared up with eye ointments, argyrol, yellow oxide of mercury or antibiotic. Tr. 7 is effective in mixed infections. Protect animals from airborne irritants.

Remove scabs from nose and lips and treat with Tr. 8. Clean up cases of urine burn and keep hutch floors clean.

Do not wean young abruptly; if litter is lost, rebreed doe and protect doe from disturbances so young can nurse properly. Correct faulty nest boxes that injure breasts.

If early case, treat with Tr. 8. Disinfect hutch and reduce feed concentrates. If late case, destroy. NEVER transfer young from infected to another doe.

Individual animals may be treated with Tr. 7; tends to recur. Tr. 9 will reduce transmission to young. Save replacement stock from clean animals and cull cases of snuffles from herd.

If started early, Tr. 7 is effective. For control in herd, Tr. 9 is effective. Eliminate stress factors, ear mange, sore hocks, abscesses on body as pre-disposing factors for pneumonia

Heat Prostration - Rapid respiration, prostration, blood tinged fluid from nose and mouth. Does that are due to kindle are most susceptible.

Extreme outside temperature. Degree varies with location and humidity.

Reduce temperature with water sprays, foggers. Place wet burlap in hutch on wet animal to help reduce body temperature.

Digestive System

Malocclusion - Incisors grow so long so mouth cannot close properly. Uppers curl back, lowers protrude. Animals cannot eat, prone to pneumonia.

Some types are inheritable, other are result of injury.

DO NOT save breeding stock from parent showing long teeth. Trim teeth on fryers to get animals to market.

Coccidiosis, Liver - White, circular spots on and through enlarged liver. Bile appears yellow in color and bladder may show sediment of cocysts. Usually cannot detect in live animals, not fatal.

Parasitic infection of the liver and bile ducts caused by the liver coccidium.

Keep floors clean , dry, remove droppings frequently. Prevent fecal contamination of feed and water. Effective control by use of Tr. 9.

Coccidiosis, Intestinal - Mild cases, no symptoms; moderate cases, diarrhea and no weight gain. Severe cases have pot belly, diarrhea with mucus, and pneumonia is often secondary.

Parasitic infection of the intestinal tract caused by coccidia.

Keep floor clean, dry, remove droppings frequently. Prevent fecal contamination of feed and water. Tr. 9 combined with sanitation will greatly reduce numbers of parasites and animals infected.

Enteritis, Bloat or Scours - Loss of appetite, little activity, eyes dull and squinted, fur rough, and animal may appear bloated. Diarrhea or mucus in droppings; animals may grind teeth. Stomach contents fluid, intestinal contents fluid, gaseous or filled with mucus.

Unknown - never has been shown to be infectious or transmitted to other animals.

Tr. 10 in feed has been of benefit in some cases. For drinking water, use Tr. 11 for treatment of individual cases. Too costly for herd control.

Fur Block - Animals reduce feed intake or stop eating completely, fur becomes rough and weight is lost. Stomach filled with undigested fur, blocking passage to intestinal tract. Pneumonia may become secondary.

Lack of sufficient fiber, bulk or roughage in the diet. Junior or developing does most susceptible.

Increase fiber or roughage in the ration. Feed dry alfalfa or timothy hay.

Tapeworm Larvae - White streaks in liver or small white cysts attached to membrane on stomach or intestines. Usually cannot detect in live animals.

Larval stage of the dog tapeworm or of the cat tapeworm.

No treatment; keep dogs and cats away from feed, water and nest-box material. Eggs of tapeworm occur in droppings of dogs and cats.

Pinworms - No specific symptoms in live animals. White threadlike worms found in cecum and large intestine, causes slight local irritation.

Pinworms.

None; infection not considered one of economic importance.

Miscellaneous

Metritis or White Discharge - White, sticky discharge from female organs, often confused with sediment in urine. Enlarged uterus detected on palpation. One or both uteri filled with white, purulent material.

Infection of the uterus by a variety of bacteria, nonspecific.

Dispose of infected animal and disinfect hutch. Infected area difficult to medicate. When both uteri are infected, animal is sterile.

Myxomatosis - Inflammation and swelling of the eyes, ears, nose, and genitals. High fever, loss of appetite, ears may droop from weight of swelling. Usually fatal, mature animals most affected.

Infection caused by a virus.

None, antibiotics not effective. Reduce mosquito population by spraying, draining stagnant water, and screening. Promptly dispose of infected animals. Infection limited to West Coast, Mexico and South America.

Papilloma - Wrinkled, horny growths, usually on ears, may form "stage horn" type of growth. Not fatal, cannot be transmitted to other domestic rabbits but can be transmitted to wild rabbits.

Infection caused by a virus.

None, not fatal, self limiting. Usually an infection of the wild rabbit, transmitted to the domestic by the bite of insects.

Milkweed Poisoning - paralysis of the neck muscles and lack of coordination. Head droops between front legs, and animal cannot eat or drink.

Paralysis caused by eating leaves or stems of the woolly-pod milkweed.

Force feed and water into animal. Check wheat or oat hay for greenish-yellow stems and leaves of milkweed. Found only in Pacific Southwest. Use hay only if free of this weed.

Pasteurellosis - May be an acute or chronic infection. Nasal discharge, watery eyes, weight loss, or mortality without symptoms. Inflammation and consolidation of lungs, inflammation of bronchi and nasal sinuses.

Bacterial Infection.

Individual animals may be treated with Tr. 7; for herd control use Tr. 9. Save replacement stock from clean animals and cull out chronically infected animals. Use sanitary measures to reduce transmission to new animals.

Pseudotuberculosis - Chronic infection, weight loss, weakness, and progressive emaciation. Small abscesses found in liver, kidneys, spleen, lungs or intestines.

Bacterial Infection.

Destroy hopelessly sick animals, disinfect hutches, and control by Tr. 10.

Listeriosis - Loss of appetite and emaciation, generally in young animal. Minute white abscesses in liver, spleen and reproductive organs. May involve central nervous system.

Bacterial Infection.

Early treatment with Tr. 11 is effective, advanced cases should be destroyed. Disinfect hutches.

Hydrocephalus - Found in young only. Top of skull raised, resembles large welt, firm to touch. Ventricles of brain enlarged, filled with excess fluid.

Nutritional deficiency, lack of sufficient vitamin A in does diet

Insure adequate vitamin A in ration. Damage is done during pregnancy. Symptoms appear in young about 10 to 20 days old.

Paralyzed Hind Quarters - Found in mature does. Hind legs drag, cannot stand or support weight of pelvis. Urinary bladder fills but does not empty.

Injury, resulting in broken back, displaced disc, damage to spinal cord or nerves.

Protect animals from disturbing factors; predators, night prowlers and visitors or noises that startle animals, especially pregnant does.

Wry Neck - Head twisted to side, animals roll over, cannot maintain equilibrium.

Infection of the organs of balance in the inner ear. May be bacterial or parasitic.

None; eliminate ear canker from herd. Some cases result from nest-box injuries.

Treatment and Medication

Treatment: (Tr.)

1. Swab ear thoroughly with mixture of: 1 part Iodoform, 10 parts ether, 25 parts vegetable oil. Repeat in 6 to 10 days.
2. Swab ear thoroughly with 25 to 30 percent emulsion of Benzol Benzoate.
3. Dust with 10 percent DDT in talc.
4. Give Griseofulvin orally at the rate of 10 milligrams per pound body weight for 14 days. Combine this treatment with dusting nest boxes with industrial fungicidal sulfur.
5. Apply a brand of hexetidine to infected area for 7 to 14 days. Combine with sulfur dusting as in Tr. 4. Formulations containing suitable concentrations of hexetidine are available commercially.
6. Combination of 400,000 units of Penicillin combined with $\frac{1}{2}$ grams Streptomycin to each 2 milliliters. Give orally approximately $\frac{1}{2}$ ml. Each day for 3 to 5 days.
7. Combination of 400,000 units of Penicillin combined with $\frac{1}{2}$ g. Streptomycin to each 2 ml. Give intramuscularly 1 ml. for fryer size, 2 ml. for mature. Repeat on 3rd day. For eye infections drop directly into eye.
8. Inject intramuscularly 100,00 units of Penicillin. For scabby nose continue treatment for 3 days. For mastitis give twice each day for 3 to 5 days.
9. Add feed-grade Sulfaquinoxaline so that level will be 0.025 percent feed 3 to 4 weeks. Add water soluble Sulfaquinoxaline so that level will be 0.025 percent feed 2 to 3 weeks.
10. Add 50 grams furazolidine per ton of feed to give a final concentration of 0.0055 percent. May be fed intermittently or continuously.
11. Water soluble chlortetracycline or oxytetracycline at a level of 1 pound to 100 to 150 gallons of water.