

# Preventive Medicine for Backyard Poultry Flocks

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Backyard poultry can be pets, as well as a source of food (i.e. eggs). This dual purpose can create several disease prevention challenges, especially if owners are not experienced in diagnosing common poultry diseases. Most common diseases and parasites can be avoided through proper management, feeding, sanitation and preventive treatment. This NebGuide will explain how diseases occur in chickens and offer tips for disease prevention.

## How Diseases Occur

Show and exhibit chickens are often exposed to chickens from different regions of the state or country that could be carrying new diseases. The stress of long distance transportation to shows and repeated handling at the shows also increases the risk of opportunistic microorganisms infecting the birds and leading to disease.

Even chickens that don't leave the backyard can catch diseases from other birds in the flock. Co-mingling older birds with younger chickens leaves the younger birds at a higher risk of contracting a disease because their immune systems are less developed.

Visitors and other hobbyists who come into contact with the birds, whether at a show or in your backyard, also pose a serious threat to the chickens if strict biosecurity is not maintained. Some viruses and organisms can be carried in on the boots of visitors and spread as they move around the farm.

Improperly disposing manure and dead birds attracts flies and other pests that might carry disease to the poultry. Not quarantining new birds in order to evaluate their disease status can potentially introduce disease into the flock. Rodents and free-living birds also can be a source of disease.

Understanding how diseases are introduced and spread among a flock can help you keep your flock healthy. *Table 1* explains steps you can take to protect your flock.

**Table 1. Tips for disease prevention.**

<i>Things to Do</i>	<i>Rationale for Doing Them</i>
1. Regular sanitation, thorough cleaning, scrubbing, and disinfection of the poultry house, is very important.	This keeps bacteria, viruses, and parasites from building up and also deters unwanted rodents.
2. Properly dispose of old litter before introducing new chicks into your poultry house.	Exposing birds to old litter is not recommended as the litter may have a build up of disease agents that the new flock has not been exposed to. This can result in a disease outbreak.
3. Quarantine new birds from outside flocks for 14 days.	A two-week quarantine is necessary to monitor for any diseases, and a longer period may be necessary to treat for diseases.
4. Do not permit visitors in your poultry houses if they have had contact or visited other poultry farms. Moreover, if there are any visitors, they should be wearing clothes and shoes (I.e. items that have not come into contact with other birds)	Visitors can transfer diseases through their clothing, shoes, and unwashed hands.

**Table I. continued.**

<i>Things to Do</i>	<i>Rationale for Doing Them</i>
5. Keep wild birds (e.g. sparrows, pigeons) out of contact with your birds.	These free living birds can carry diseases and parasites to your flock.
6. Purchase feed from a reliable source, and do not feed moldy feed.	For health and productivity, birds require a nutritionally-balanced feed.
7. Vaccinate against common diseases	Chicks and pullets should be vaccinated as they develop antibodies against common poultry diseases.
8. Provide a well-ventilated but draft-free building with appropriate space available for the number of chickens housed.	This reduces ammonia build-up, stress, and pen-mate fighting.
9. Properly dispose of dead birds.	This reduces potential transmission of diseases. Flies can be carriers of disease from infected birds. Improperly disposed birds can be a source of odor and attract flies.
10. Separate sick chicken from the rest of the flock.	Diseases can be spread through direct contact with infected birds.
11. In the event of a disease outbreak in your flock, get an accurate diagnosis as soon as possible.	Some diseases show similar clinical signs, although the proper treatment may differ.
12. Extreme care must be exercised when doing routines between different species of birds.	Pet birds, like parrots, can pose a serious threat to chickens because they can harbor diseases that can be very devastating to a chicken flock.

### Vaccinations

Vaccination is an important biosecurity measure. Newly hatched chicks have a certain amount of natural immunity, and they continue to acquire new immunities as they mature. Your flock may require help to develop additional immunities against diseases found in its environment. *Table II* is a guide. For specific help in developing a vaccination program based on diseases occurring in your area, contact your local veterinarian or extension poultry specialist and your local Extension office.

**Table II. Vaccination of chicks.**

<i>Disease</i>	<i>Vaccination age</i>
Marek's Disease	1 day old
Newcastle Disease/ Infectious Bronchitis	10 days and 35 days old
Infectious Laryngotracheitis	6 weeks old
Avian Encephalomyelitis	8 weeks
Fowl Pox	10 weeks old
Fowl Cholera	12 weeks old
Newcastle Disease/ Infectious Bronchitis	12 weeks, (6, 9, 12, and 15 months ) old

Wear protective gear like coveralls, hairnets, mask and gloves, and use proper hand washing techniques, including using an antibacterial soap, when working between species and different ages of birds.

Good husbandry practices should provide the poultry hobbyist with a healthy and happier companion chicken. For more information or concerns you can call the Nebraska Veterinary Diagnostic Center at (402) 472-1434.

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