How prevention and control of Poultry diseases?

Various aspects for prevention and control of poultry diseases are:

1) Cleaning and Disinfection
2) Proper housing
3) Proper feeding
4) Stress management
5) Disposal of poultry waste
6) Restriction for visitors
7) Vaccination against dreadful poultry diseases and preventive medication.

* Proper Housing:

• It is important for optimum growth and production as well as for proper maintenance of health. So we have to apply the following rules:-

a) Overcrowding must be avoided.
b) All-in all-out system of rearing is better than multistage rearing in a single location. All-in all-out method helps to prevent spread of diseases due to cross age infections.
c) Poultry house should be kept dry and well ventilated.
d) The design and construction of poultry houses should be made according to the environmental conditions of the particular area.

Stocking Density :

A higher stocking density of poultry in addition to crowded housing conditions has been shown to have a negative impact on performance, causing stress to both the birds and intestinal microbiota.

• For breeders – Males will reach a heavier weight than females so require extra floor space to ensure they reach their adult weight. Males and females must be grown separately for at least 6 weeks, or to 21 weeks.
• **Brooding – Males and females** – for the first 5 days stock at 30 chicks/square meter
• **Rearing – Females -** 6 – 7 birds/square meter

• **Males –** 3 – 4 birds/square meter
• **Production Breeder Females -** 3 – 5 birds/square meter
Broilers 6-8wks – 12 – 14/square meter
Laying pullets – 10/square meter
Laying hens - max 5/box 60cm x 60 cm

*- Stress Management in Poultry

In poultry farm, birds are subjected to various kinds of stress.
Some stress factors are:
A. Avoidable
B. Unavoidable.

A)) Avoidable stress

Avoidable stress factors are:-
1) overcrowding (giving less floor space per bird).
2) improper debeaking**.**
3) sudden change in feed.
4) poor quality of feed.
5) irregular feeding schedule**.**
6) inadequate ventilation.
7) improper lighting schedule.

❖ These types of stress can be reduced by improving the management practices.

The unavoidable stress:

The unavoidable stress factors in poultry farm are:-
1) shifting of birds (from hatchery to farm, or from one house to another like from brooder house to grower house and from grower house to layer house).
2) Extremes in weather (heat stress in summer or cold stress in winter).
3) Vaccination.
4) Deworming and other preventive medication.

❖ To **minimize** the action of these stress factors **anti-stress medicines** are to be used in proper dose rates.

* Vitamin C and other vitamins, liver tonic, glucose and electrolytes, etc. are used as anti-stress medicines.

*- Disposal of Poultry Waste:

✓ Various poultry wastes are poultry droppings, hatchery waste and dead birds. Proper disposal of these poultry wastes is essential to prevent the spread of diseases.

✓ The dead birds should be deeply buried in the soil or fully burnt in the incinerator.

✓ system of poultry rearing. This litter should be removed from the poultry house before introduction of new lot of birds. In case of cage system of poultry rearing, poultry droppings should be removed daily.

*- Vaccination and Preventive Medication against Dreadful Poultry Diseases:

In case of poultry health management 'prevention is better than cure' principles to be applied more seriously. So proper vaccination schedule is to be followed to develop immunity against killer poultry diseases .

Do and don'ts in vaccination

1) Vaccine itself induces stress to the birds. So use of all available vaccines for a particular bird is not generally recommended, and it very much depends on the incidence of a particular disease in the farm and its surrounding areas.

2) Vaccines should be procured only from reliable sources.

3) The vaccines are to be stored under refrigeration until use at the temperature of 2° to 8°C.

4) Proper vaccination schedule including accurate dose of vaccines and proper age of birds .

5) Expired vaccines and left-over vaccines should never be used.

6) It is desirable to vaccinate the birds during **the cooler** part of the day, either in the early **morning** or in the **late evening** especially in summer months.

7) Vaccination should not be done to the sick birds. Only healthy birds are to be vaccinated at their recommended ages.

8) It is desirable to provide some vitamins at least a week before the vaccination to overcome vaccine induced stress.

9) For vaccination through drinking water, birds are to be **kept thirsty** for a **few hours** before giving vaccine containing water. Clean and cold drinking **water should be used for this purpose and it should be free from chlorine or any drug**.