

Newcastle disease and its control

How to use this flip chart

- 1 Read the information that goes with each picture and practise your talk at home before your first public meeting.
- 2 Show each picture in a way that people (so that everyone) can see it clearly and ask your audience to explain what they see in it.
- 3 After/when everyone has agreed on what the picture shows, present the written part that accompanies each picture.

N.B. the oral presentation starts here!

Figure 1. Newcastle disease is a problem for chicken farmers all around the world.
In Mozambique, Newcastle disease causes many deaths in village chickens and chickens raised in towns.

Figure 2.

Apart from Newcastle disease, there are other diseases and problems that can kill chickens. What are they?

Newcastle disease is the disease that kills more chickens than any other disease.

Therefore, we need to be able to recognise the characteristics of this disease.

The name given to Newcastle disease varies from country to country and sometimes from district to district.

For example, in English speaking countries it is called Newcastle disease,

In many Asian countries it is called Ranikhet Disease.

What is the name of Newcastle disease here?

Figure 3.

Look at this picture. What can you see?

The wings of the chicken are drooping. In some countries, the farmers say that the chicken is wearing a coat or that its coat is dragging on the ground.

Its feathers are fluffed up.

Its head is twisted and sometimes its head will be swollen.

Figure 4.

Please describe what you can see in this picture.

The chicken has diarrhoea that is often green in colour. This means that when the bird goes to the toilet it will pass green liquid rather than firm, well-formed manure.

The diarrhoea makes the feathers under the tail of the bird dirty.

Figure 5.

What does this picture show?

This chicken has a twisted neck and fluffy feathers.

Often it will find it hard to breathe.

Figure 6.

What is happening here?

There are many dead chickens.

What disease can cause so many chickens to die at the same time?

Newcastle disease is the only disease that can cause many deaths in a short period of time.

Figure 7.

What birds do we see here?

We have a turkey, a pigeon and a duck.

These birds can spread Newcastle disease.

Turkeys and the pigeons can get sick from Newcastle disease.

Adult ducks can get Newcastle disease but they will not die. However, ducklings can get sick from the disease.

If you see that ducks of all ages are dying from a disease, it is because of another disease that attacks ducks. It is not Newcastle disease.

Figure 8.

What can we see here?

We can see a woman and a man.

The woman has a sick chicken.

The man is carrying a tray with some garlic, washing powder and chillies.

Have you ever used this type of treatment? Did it work?

Do you know of other types of traditional treatments?

When do you use these types of treatments?

Is it when the chicken is already sick or before the chicken gets sick?

Figure 9:

Here we have a picture that is a bit complicated. It shows some ways that Newcastle disease can be spread. We will look at the picture part by part.

In the centre we have a healthy chicken.

Around the chicken are circles containing different things.

On top we have a chicken with diarrhoea (liquid manure).

Next is dog that is eating a dead chicken.

Then there are some eggs.

Next, a car.

Here are some leftover parts after a chicken has been slaughtered, some feathers, bones and internal parts.

The last circle shows a man and his foot prints.

Newcastle disease is caused by very small particles that we cannot see with our eyes. These particles can be spread in many ways. For example, the disease particles from a sick bird could sit on the shell of an egg and be transported to new areas. The particles could also be transported on shoes, bird cages, baskets and vehicles.

Do you have any questions about this picture?

Figure 10.

What does this picture show us?

We can see a woman who is worrying about her chickens. She is wondering what she needs to do to raise healthy chickens.

Figure 11.

What can we see here?

There is no known cure for Newcastle disease. The only way you can stop your chickens from getting sick (protect your chickens) is to vaccinate them against Newcastle disease.

Chickens should be vaccinated at least one month before the disease is expected to occur.

It is very important that only healthy chickens are vaccinated. Once a chicken gets sick, it is too late to give the vaccine.

After vaccination the chickens can be slaughtered and eaten without causing any problems for people.

There are different types of vaccine. We are using a Newcastle disease vaccine called I-2. It is made in Mozambique and can remain good even if it is kept outside a refrigerator for two months. This vaccine is useful because we know that we do not have many refrigerators in our villages.

Figure 12.

What do we have here?

We have a chicken and someone putting a drop into its eye.

The best way to give the Newcastle disease vaccine is by putting a drop into the eye of the chicken.

It is easy for farmers to learn this.

The vaccine is mixed with fresh and clean drinking water before it is given to the chicken.

Each chicken of all ages, from one day old to adults, needs only one drop in one eye.

Look at the picture again. You can see that the eye-dropper is held straight and this is important to make sure that a drop of the correct size is given to the chicken.

Figure 13.

What is shown here?

We have a calendar with instructions added to it. The calendar has the months of March, July and November marked in black. These are the months when vaccination is to happen so that chickens are vaccinated every four months.

By vaccinating every four months, the chickens will be protected all year around. And newly hatched chicks will also be protected. To make sure that we have the vaccine in time for the vaccination, we should count the number of chickens that we have and order the vaccine well before the campaign.

Figure 14.

Look at this picture. What do you see?

We said earlier that the vaccine could stay outside the refrigerator for two months but this does not mean that you do not need to take care of it.

In the top part of the picture we can see that the vaccine was left in the sun. When this vaccine was given to a chicken, the bird was not protected and got sick from Newcastle disease.

It is important to keep the vaccine in a cool, dry place. It should not be exposed to heat or sunlight.

In your house, you can keep the vaccine near the base of a clay water pot or wrapped in a damp cotton cloth. Keep it in the shade as shown in the lower part of the picture.

When you must carry the vaccine in the field, wrap the vaccine in a damp cloth and put it in an open weave basket with a lid.

Remember to vaccinate chickens in the shade.

Figure 15.

What can we see here?

Now we are going to talk about how we can avoid spreading Newcastle disease from one village to another.

The woman in this picture bought a chicken at the market and is bringing it home. After a few days, all of her chickens died.

It is important that we do not bring new birds to our farms when Newcastle disease outbreaks are occurring in nearby villages.

Figure 16.

Tell me what you see here.

We can see one woman with a chicken and two chicken houses.

What is she doing?

She is taking a sick chicken away from the main chicken house to stop it from spreading the illness to her other birds. Once the bird is sick, it cannot be vaccinated. All you can do is offer it food and water and a safe place to rest.

Do many farmers have two chicken houses?

Maybe not. What could you do to keep sick chickens away from healthy chickens?

Figure 17.

What is happening here?

On top we can see many dead and sick chickens.

What do you do when chickens die from Newcastle disease?

When a bird is very sick, it is better to slaughter it.

No sick or dead chickens should be carried from one house to another, or to new villages where the chickens are still healthy.

Any chicken that has died from disease should be burnt or buried.

If you do not burn or bury the whole chicken, make sure that the parts that you have not used are burnt or buried. These unused parts may be feathers, bones or internal parts.

In the bottom of the picture, the woman is putting feathers and other parts of a bird into a pit.

When chickens have died from Newcastle disease, wait at least 30 days before you bring new birds into the same place.

Figure 18.

What can we see here?

Here are two types of chicken houses.

Do you have a chicken house at home? What type is it?

A good chicken house will stop diseases spreading easily between birds.

Big (Adult) chickens can get into an elevated (high) chicken house. The floor in this house is made with poles to allow the manure to fall through to the ground away from the birds.

Always remove the bark from the wood used to make houses so that parasites such as fleas, lice and mites cannot hide under the bark.

Clean your chicken houses at least once a week. After cleaning, put ash on the ground and the walls to stop problems with fleas and mites.

Figure 19.

Tell me what you see here.

Village chickens usually find their own food. But if we can give them a little extra food, then they will grow bigger and lay more eggs. A bird that eats well will also be better able to fight off disease and will respond better to vaccination.

Good nutrition is very important for young chicks.

How can we give chicks more food?

We can give them food scraps, ground rice or maize, green leaves, insects and ground shells. Give them clean water as well.

The cage in this picture can be used to give small amounts of food to the young chicks without feeding the hen. This means that when you do not have a lot of food available, you can give very small amounts to the chicks only.

Figure 20.

What is happening here?

We have two women talking. One of the women has a sick chicken.

We know that Newcastle disease is not the only disease that causes problems in our chickens.

If you have any questions, always ask someone from the veterinary or extension services. They are there to help you.

This is the end of my presentation. If you have any questions or comments, I will be happy to talk with you about them.

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