PROFESSIONAL AND LEGAL RESPONSIBILITIES OF VETERINARY SURGEONS IN CONTROL OF ANIMAL MOVEMENT AND DISEASES.

Objectives:

At the end of this lecture the students should be able to:

- Understand their professional and legal responsibilities in control of animal movement and diseases.
- Understand the regulations or laws as stated in the sections of the animal disease control act in the Nigeria constitution.
- Reasons for enacting such regulations or laws.

Introduction

Who is a Veterinary Surgeon?

A Veterinary Surgeon is a person who has undergone training in Veterinary Medicine and is registered with the Veterinary council. E.g. Veterinary Council of Nigeria.

A Veterinary Officer is a Surgeon who is employed by the Public service (e.g. in the Ministry or Federal Livestock Department).

Professional and Legal Responsibilities

Every veterinary surgeon has both professional and legal responsibilities to use their <u>scientific</u> <u>knowledge and professional skills to protect animal health, relief animal suffering and to</u> <u>conserve livestock resources.</u> These are in addition to promoting animal production and public health. Veterinary officers are however empowered by the law to carry out some legal responsibilities to enhance enforcement of the existing veterinary laws on behalf of the government.

The extent that a Vet. Surgeon or officer will carry out his/her professional responsibility will depend on individual knowledge, skills and competence.

Control of Animal Movement and diseases

In order to prevent diseases and ensure standards in control of animal movement and diseases in Nigeria, <u>the Animal diseases (control) Decree of 1988</u> has been enacted. This Decree (Law)

gives legal backing to a veterinary surgeon/ officer towards performing his/her professional and legal duty in controlling animal diseases and movement.

Animal diseases control is one of the four distinct subject areas addressed by what is commonly called Veterinary legislation or jurisprudence. Within the last decades, increases in the movement of animals have aided the spread of animal diseases. Trade liberation is one explanation, as countries have been seeking to benefit from lowered barrier to regional and international trade in animals and animal products. Infrastructure improvement in response to expanding industrial needs have also contributed to the rapid spread of diseases.

The animal disease control decree are laws backing preventive medicine and movement of animals both within the country and outside, disease notification, control of trade animals and quarantine measures.

Animal Diseases (control) Decree (No.10) 1988

This is the oldest law so far. It was first enacted on 25th October, 1917 as disease of animal ordinance. In 1962 it was amended to disease of animal Act 1962. In February 1988 it was re enacted and called Animal Diseases control Decree 10 1988. The purpose of this law is to prevent the introduction and spread of infectious and contagious diseases of animals. This law has 24 sections addressing various aspects of animal disease control and movement.

Importation of Animals, Animal products and biologics.

<u>Sections 1-5 of this decree forbids the importation of any animal, animal products</u> and biologics including hatching eggs or poultry into Nigeria from any country, by land, sea, or air except with the permission of the Director of Federal livestock Department (FLD) (Listed in **Schedules 4 or 5 of the decree)**. The conditions under which these products should be imported must be stated. The animal and other products as mentioned above to be imported must come from areas or countries free of diseases, have a genuine reason for importation, must have obtained current certificate of health i.e. records of vaccination.

 An authorized Veterinary Officer has to inspect at any of the quarantine stations or control posts (Listed in schedule 2 and 3) any of such imported items to ascertain their condition of health.

- Any animals, animal products and biologics imported into the country without proper permit shall be seized and destroyed by an authorized office. Such seizure or destruction shall be reported without delay to the magistrate having jurisdiction in that area.
- It is the legal responsibility of a Vet. Officer, police or an authorized officer to enter any premises where he suspects any of such animals, animal products, and biologics has been dumped or kept (Section 7)

Exportation of Animals, Animal byproducts and Biologics.

Exportation of any animals, animal products and biologics including hatching eggs or poultry from Nigeria except under a permit from the director of FLD is prohibited by the law. This is to ensure that animals exported to other countries do not become a threat to them.

Disease reporting -- Section 8

- Any person having under his charge or control, an animal infected or suspected to be infected shall keep such animal separate from others not so infected and then report to a Vet. Surgeon or the prescribed officer in the Local government area.
- A Vet. Officer is expected to enforce the regulation of isolation and non movement of infected animals and report to the nearest magistrate or police officer.
- A Vet officer shall administer Veterinary vaccine or biologics or issue such orders or directions or prohibitions as he may deem necessary or advisable, to prevent spread of the diseases and may cause such animal to be slaughtered.
- All Veterinary vaccines shall be handled, sold or administered only by a Vet. Surgeon or a prescribed officer.

- A Vet Officer may for the purpose of examining diseased animal, and after identifying himself, go into any premises and may for the purpose of diagnosing diseases take blood smear or apply any test.
- May seize and detain animals in relation to which breach, non-compliance or contravention has been committed, such seizure must be reported without delay to the magistrate or police in the area.
- Where any animal dies of a disease or slaughtered and the carcass is in the opinion of the Vet as infected with disease such carcass should be disposed by burning or in such manner as the Veterinary officer directs.

PENALTY: (Section 10) A fine of N 250 or 3 months imprisonment or forfeiture of the animal.

COMPENSATION: (Section 11) Compensation may be paid to the owner of the slaughtered animal or any part of animal that has been destroyed under this decree.

Control of trade animals (sections 12-17)

Movement of animals from one part of the country to another for the purpose of trade requires that the trader obtains permit and annual license before he can participate. The control of trade animals prescribed under this decree is exercised by the director of federal livestock department or the chief veterinary officer as the case may be. Any person in charge of trade animals entering from any place outside Nigeria into any part of the country shall move all the animals by the most direct route to the nearest control post.

- Concernment of trade animals shall be examined at every control post (see Schedule 3 to this decree) by Vet. Officer.
- NOTE: Control posts mean an established area along trade cattle routes at international and inter-state borders or within the states with facilities for inspection, examination, vaccination and treatment of trade animals.
- A veterinary officer under this section shall inspect any trade animal brought to any control posts.

- A Vet. Officer may put identification mark on sick animal or may for the purpose of treatment or prevention of any disease, detain such animals to allow for proper observation and therapy.
- Animals traveling for more than 12 hours by rail or road shall be rested, watered and fed every 12 hours.
- Loading and unloading ramps shall be provided for trade animals being carried on a vehicle.
- Loading and unloading permit shall be obtained: Before loading, a Vet. Officer shall examine the animals and the loading permit, while movement permit is issued at every control post following compliance with conditions stated for movement of trade animals in the decree (section 13).

National Veterinary quarantine Services

NVQS is a Division under Federal Department of Livestock and Pest Control Services, Federal Ministry of Agriculture and Rural Development. Its main objective is to prevent the introduction, establishment and spread of animal and zoonotic diseases into and out of Nigeria in course of Animal / Animal commodities trade and movement.

In accordance with the Animal Disease (Control) Decree act No. 10 of 1988, the NVQS has the following responsibilities : Issuance of Import / Export permits by the Office of the Director, Federal Department of Livestock and Pest Control Services for the Importation / Exportation of Animals / Animal products, Day old chicks, eggs, Vaccines and Biologics.

• Certification of all import / Export permits including Animal Health certificates that accompany Animal / Animal products on import / exports.

- Inspect / Assess the Animal / Animal products, Day old chicks, Eggs, Vaccines and Biologics to ensure they are healthy and of good quality.
- Effect quarantine of Animal / Animal products, Vaccines or Biologics where disease is suspected or it is of poor quality or of low standard at the expense of the owner.
- Treat the disease animals and may sanction the owner and destroy as the case may be.
- Issuance of Import / Export permit for Wildlife subject to the acquisition of CITES permit from the Federal Ministry of Environment.

NVQS has 19 service points in the country where it performs a 24 hour service for disease surveillance. On August 8, 2006, Mr. President gave approval for the presence of NVQS at the International Airports and Seaports on a continuous basis and membership of the Joint Intelligent Board. The Designated Veterinary Quarantine Service points include:

International Veterinary Quarantine Stations:

- Murtala Moh'd International Airport, Lagos.
- Nnamdi Azikiwe International Airport, Abuja.
- Mallam Aminu Kano International Airport, Kano.
- Port Harcourt International Airport, P.H.
- Apapa Wharf Seaport, Lagos.
- Tincan Island Seaport, Lagos.
- Port Harcourt Seaport, Port Harcourt

Interstate Veterinary Control Posts:

- Jebba in Niger State
- Makurdi in Benue State
- Lokoja in Kogi State

International Veterinary Control Post;

- Seme border in Lagos State
- Imeko in Ogun State

- Jibia in Katsina State
- Illela in Sokoto State
- Maigatari in Jigawa State
- Gamboru / Ngala in Borno State
- Mubi in Adamawa State
- Ikom in Cross River State
- Idiroko in Ogun State

Importable / Exportable items:

The following items can be imported /exported subject to Veterinary permit in accordance with O. I. E. regulation.

- Live animals: Dogs, cats, horses, cattle sheep and goats.
- Animal products: Tallow, horns, hooves, hides/skin and blood/bone meal.
- Animal commodities: Cheese, butter, processed milk, corn-beef, pet food and animal food.
- Biologics: Vaccines, sera, infectious agents, semen etc.

Banned items for importation: Due to the outbreak of Avian Influenza, the following items have been banned for importation: Chicks, Eggs, Avian Influenza vaccines, and Rinderpest Vaccine

Applications for Import / Export permit: The permit can only be obtained from the office of the Director, Federal Department of Livestock and Pest Control Services, Federal Ministry of Agriculture and Water Resources, PMB 135, Area 11 Garki, Abuja.

All applications must be accompanied by the following information:

- i. Name of the animal
- ii. Age
- iii. Sex
- iv. Colour
- v. Breed of animal

- vi. Identification mark
- vii. Description of animal product or biologic
- viii. Quantity / specification
- ix. Date of proposed import /export
- x. Port of embarkation
- xi. Port of disembarkation
- xii. Method of transportation
- xiii. International Veterinary Certificate and Vaccination Certificate (where applicable) issued by a registered Veterinary Surgeon at the country of origin of the animal / animal product.
- xiv. CITES Permit from the federal Ministry of Environment in respect of wildlife.

Conclusion:

It is the responsibility of every veterinarian to ensure that animals, animal products and biologics are imported into or exported from the country only after necessary permit has been obtained. Also, in order to ensure control of animal diseases and safety of public health, Veterinary Surgeons and Officers must be awake to their professional and legal responsibilities. There is however a need for review of the penalty stipulated in the decree for defaulters.

NOTE: the following terms.

- Control posts mean an established area along trade cattle routes at international and inter state borders or within the states with facilities for inspection, examination, vaccination and treatment of trade animals.
- Quarantine station means a designated place where animals' with their boxes, rugs, kennels which have come from infected or suspected to be infected countries are detained.

DISEASE REPORTING SYSTEM

Definition of terms

Disease reporting system- This is diseases accounting system in a population. It entails how diseases records and information should be kept, stored, transmitted and utilized.

Disease prevention- : Measures taken to protect our environment from invasion. These are measures taken so that clean population is not affected.

Disease control – This is carried out in affected population to stop the spread of a disease.

Disease eradication- This is stamping out of disease in a population e.g. eradication of small pox and rinderpest.

Pattern of disease occurrence

Endemic /Enzootic diseases – The constant presence of a disease or infectious agent in the population

Pandemic /panzootic disease-: Greater epidemic disease spreading faster. Outbreak of a disease throughout the world/part of the world for example Influenza.

Sporadic –: No specific pattern of occurrence of a disease in a particular population.

If a disease occurs only occasionally, rarely or without regularity in a population-Anthrax

Epidemic: Occurrence of a disease in a given area clearly in excess of normal expected frequency. It can either be a point epidemic or propagative epidemic:

Frequency of Diseases Occurrence

Incidence: This represents the rate of occurrence of new cases of a disease or event in a population at risk during a specified period of time

Prevalence: This represents the number of existing cases of disease at a given point in time.

Diseases outbreak: An increase in occurrence of a disease in a particular population-

Incubation period: Time of entrance of an infectious agent to the first signs of disease.

IMPORTANCE OF DISEASE REPORTING

- (i) It can help the govt in planning and budgeting
- (ii) Determination of location of livestock project
- (iii) Vaccine production and distribution
- (iv) In case of an outbreak the report will arrive early, this enables planning a better control system for early arrest of the disease
- (v) For assessment of losses
- (vi) Planning of research project: Where to collect data and type of research to carry out
- (vii) Syllabuses is based on this reporting in colleges because emphasis are placed on the disease that are prevalent
- (viii) International benefits- Importing from disease free countries, business with other countries become easier

HISTORY OF ANIMAL DISEASE REPORTING IN NIGERIA

First attempt at livestock disease reporting in Nigeria was around 1914 after the establishment of the veterinary department. The Disease of Animal Ordinance of 1917 allocated the report of 17 diseases to provisional veterinary officers until the period between 1967 and 1974 when central collation was stopped. In 1975 the national livestock development council redefined and updated the previous reporting procedure. About 113 animal diseases were divided into five categories. Out of these 30 diseases were made compulsorily reportable in case of occurrence or suspected to occur at any location in the country. Animal disease Act of 1988 CAP 54, Laws of the federation backs them up.

- The disease reporting system was designed by Dr. Lang who came from England and was mandated to recommend diseases reporting system in Nigeria. Under the system, diseases are to be classified into two major groups.
- Group I A 5 diseases Rinderpest CBPP FMD Rabies, NCD
 - B 29 not reported in Nigeria except ASF and avian influenza

Group II C 18 diseases

- D 10 diseases
- E 51
- Total 113 diseases

Group A – These are transmissible diseases which have the potential for very serious and rapid spread, which are of serious socio-economic or public health consequence. Also this disease can kill 100% of the affected animals (High mortality).

Group 1B – The diseases under this category cause high mortality, great economic losses but have not been reported in Nigeria. Group 1b has been as enlisted for actions to be taken. The disease should be reported even in suspected outbreak to veterinary authority by the fastest means to the monitoring officer of the state once the veterinary officer diagnose for example any of this disease, he will order Ring Vaccination 10km radius to the centre of the site of diseases outbreak, or order a restricted movement of animals in and out of such area.

Group II- This is divided into subgroup C, D & E. C group are those of socioeconomic importance but the risk/loss is not as high as those in A & B e.g. Gumboro, PPR, blue tongue, Bovine brucellosis, lumpy skin disease, sheep pox and mareks. All the diseases are very important outbreak should be reported as they occur – documented and reported.

Group D- 10 diseases – Anthrax, backleg, Strangles, Epizootic, lymphagitis, Ulcerative lymphagitis, Erysipelas, Fowlpox- outbreaks of this disease are to be reported on monthly basis. These diseases can easily be managed.

E- There are 51 diseases in this group. The outbreak is reported quarterly e.g Actinobacillosis, trypanosomosis, babesiosis, fowl cholera, footrot, Actinomycosis, Anaplasmosis, Coccidiosis

Evolving database systems used in the health Surveillance and disease reporting

From the early passive surveillance evolved the present NADIS active surveillance reporting platform which is a hybrid software database which was developed by the Nigerian Federal Epidemiology unit using characteristics of PACE and WAHIS

PACE – Pan African Program for the control of Epizootics

The Pace Program began operations in Africa in 2001 and was completed in 2006- it was an African passive surveillance support network, implemented and technically managed by AU-IBAR (African Union- International Bureau for Animal Research using ARIS (animal research information system) owned by IBAR

The disease control and surveillance format in Nigeria PACE program's objective in Nigeria was to eradicate Rinderpest, FMD, PPR (Pestes des petites ruminante), BCPP, ASF NCD and HPAI. PACE program introduced into Nigeria the institutional and operational framework used in passive disease surveillance reporting and control /eradication policies and programs. PACE left 179 surveillance posts across the country and continue to be used as focal points for area surveillance and disease reporting.

World Animal Health Information System (WAHIS).

This is a web based interactive information system used by OIE to enter and evaluate livestock disease from disease reports submitted by member countries. It provides for the entry of four levels of reporting by participating countries.

- (i) Emergency reports following initial disease outbreaks
- (ii) Periodic follow up reports until the disease is under control
- (iii) Biannual reports providing amalgamated disease information
- (iv) Annual reports which amalgamate the biannual reports

WAHIS provides GIS information of outbreak locations, as well as natural inventories of geopositioned livestock establishments, markets, abattoirs and control post.

-WAHID and PACE database software is being used by the NFVEU (Nigerian Federation Veterinary Epidemiology Unit) to configure its own database platform called the National

Animal Disease Information System (NADIS), on which an active Nigeria Veterinary Surveillance and disease reporting system will be based.

WAHIS provides the yardstick used by the OIE to certify countries free of reportable diseases

NADIS is operating with inputs for VCN, NVMA, Private Veterinary and Nigeria Agro Credit & Rural Development Board (NACRDB). It receives information from the surveillance agents at the LGA level and from the 179 Surveillance points in the 15 zones across the country's 37 state left by PACE using the WAHIS reporting format of monthly, biannual and annual disease reporting reports. Monthly disease information data originating from the SA were originally submitted by hard copy, laboriously keyed in manually but with NADIS software, data are now electronically transmitted to the NADIS server at the NCO office for electronic entry, automatically. This has significantly improved the quality control of data submission in t