

# Disease Prevention and Control

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Presentation 3

## What are the professional objectives of an SQP?



- To supply goods and services that support the sustainable success of their clients' businesses and so the sustainable success of their own businesses.
- To safeguard and promote the health and welfare of animals in their clients' businesses.

**These objectives are wholly compatible and consistent with each other**

## Range of skills and expertise required by a livestock farm



- Stockmanship
- Nutrition management
- Disease awareness
- Disease diagnosis
- Disease treatment
- Supply procurement
- Livestock marketing
- Financial management
- Building design
- Engineering design
- Engineering maintenance
- Grassland/crop agronomy
- Soil & water management
- Biodiversity management
- Health and safety management
- Soil, feed & water diagnostic analysis

## Role of SQPs



- All SQPs have a specialist role in supply procurement
- But also can have roles in:
  - Promoting disease awareness
  - Supporting disease prevention and control
  - Other areas which reflect the details of the suppliers business and the clients needs

## Promoting Disease Awareness



- Depends on the SQP's up-to-date knowledge, experience and local/farm-based awareness
- Fit for Profit Module provides information that supplements the AMTRA training manual
- Module also highlights sources of additional information – some are printed-book based but most are internet-based, requiring a basic level of IT skills

## Module: For Dairy Cattle, Beef Cattle, Sheep, Pigs and Avian Species there are sections on:



- Abortion and Pregnancy
- Digestive diseases
- Leg, Feet and Joint Diseases
- Lung and Respiratory Diseases
- Mastitis Diseases
- Mouth and Throat Diseases
- Neonatal Diseases
- Nutritional Diseases
- Other Diseases
- Parasites: External and Skin
- Parasites: Internal

**In each section there is a Table then Brief Notes on each entry. In each sections there are also 'Cautions'**

## Fit for Profit: Caution 1



- The types of veterinary medicines referred to cover all legal distribution categories; in some instances, such as antibiotics and a substantial proportion of vaccines, products may be POM-V. SQPs should therefore confirm the most relevant formulations and the legal distribution category on the NOAH Compendium website ([www.noahcompendium.co.uk](http://www.noahcompendium.co.uk))
- Where vaccines are involved the recommendations of RUMA should be considered ([www.ruma.org.uk](http://www.ruma.org.uk))

## Fit for Profit: Caution 2



If a condition to be treated or prevented requires clinical diagnosis or laboratory analysis of samples for disease diagnosis or microbiological typing or if a POM-V veterinary medicinal product seems likely to be indicated, SQPs should advise clients to seek assistance from a veterinary surgeon.

## Fit for Profit: Caution 3



**Additionally, clients should be referred to a veterinary surgeon if there is no specific licensed product that appears to meet their need. Veterinary surgeons have legal powers to prescribe veterinary medicinal products under the ‘cascade’ system and this may allow the use of a product which has been approved for another species of animal.**

## Fit for Profit: Caution 4



- **The listing of diseases and conditions is not exhaustive; rather it covers what might be regarded as common diseases and conditions that might be encountered in the UK.**
- **For ease of reference the diseases are listed under category headings, reflecting the way the disease or condition is expressed in the animal and/or the cause of disease.**
- **However, diseases may lead to a range of symptoms in the same species and to different symptoms in different species.**
- **The categorisation should therefore not be taken as indicative evidence of diagnosis or that the causative organism will result in a simple set of symptoms.**

## Tables and Brief Notes Provide Information on:



- Is disease treatable or untreatable?
- Is it a zoonotic disease?
- Is the disease notifiable?
- What are the recommended methods of prevention and control?

## Common Themes in Disease Prevention and Control



- Prevention is better than cure!
- Biosecurity reduces risk of disease ingress!
- Environment – both built-environment and outdoor-environment are key considerations!
- Cleanliness is close to godliness!
- Preventative treatment is important where identifiable disease risks are high!
- Preventative treatment is not an excuse for not addressing the underlying disease risk!

## Biosecurity: Sources of Risk



- Animals
- People
- Machinery and Vehicles
- Feed
- Environment including housing, outdoor field conditions, weather etc

**Analysis of key sources of potential infection is a key consideration in minimising risk**

## Means of Disease Spread



- Direct transfer between infected animals or maternal transmission
- Airborne transmission
- Transfer via the environment – bedding, housing, vehicles, humans, vermin, contaminated feed or water
- Transfer through secondary vectors e.g. ticks, mites, flies etc

## Key risk considerations



- Animal movements
- Animal handling
- Animal transport
- Change in environment/location
- Weather and temperature patterns
- Local disease risk factors
- Failure to break the disease-risk chain

## Recognition of Disease



- Alimentary e.g. diarrhoea, bloat, ill-thrift
- Respiratory e.g. coughing, laboured breathing
- Cardiovascular e.g. sudden death
- Skin e.g. itching, rubbing, loss hair
- Locomotor e.g. lameness, swollen joints
- Reproductive e.g. abortions, infertility
- Urinary e.g. straining, blood stained urine
- Nervous e.g. staggering, muscular tremors

## Recognition of Disease



Most diseases are initially recognised either by:

- stockmans' observations or abnormality

OR

- evidence of performance abnormality via farm recording

OR

- clinical veterinary diagnosis often prompted by observed abnormality or poor performance

## Farm Health Planning

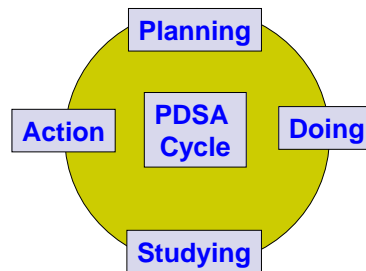


- A farm health plan is : **Any written plan designed to maintain or improve the welfare of livestock on a farm unit**
- Two main methodologies:
  - PDSA Cycle approach
  - Hazard Analysis Critical Control Points (HACCP) approach



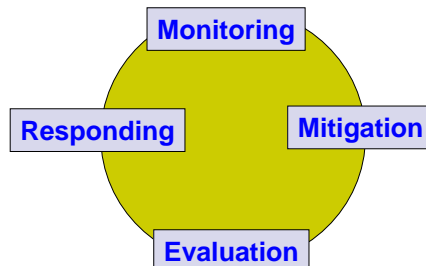
## PDSA Approach

- **P**lanning, **D**oing (Implementing), **S**tudying the outcomes, taking **A**ction to correct or revise the plan. A continuous cycle of improvement.



## PDSA Approach - Livestock

- Monitoring by keeping records
- Mitigation by acting to reduce risks and improve performance
- Evaluation to assess performance and risks
- Responding to make changes and plan by setting new targets



## 7 Principles of HACCP Approach



Based on food safety in food manufacturing:

- Conduct a hazard analysis (1)
- Determine critical control points (2)
- Establish critical limits (3)
- Establish monitoring procedure (4)
- Establish corrective actions (5)
- Establish verification procedures (6)
- Establish record-keeping and documentation (7)

**The details of HACCP require some adjustments for application on a livestock enterprise but the underlying principles apply**

**The End**

