

Higher National Unit Specification

General information for centres

Unit title: Biosecurity and Animal Health Planning

Unit code: DE2H 34

Unit purpose: This unit is designed to make candidates aware of the importance of biosecurity in reducing the risk of disease occurring or spreading to other animals. This unit provides candidates with knowledge of the health implications (animal and human) of livestock disease and the effect that exotic and endemic diseases can have on business productivity. Candidates will be required to demonstrate the ability to recognise signs of good health in livestock and an understanding of the practical applications of key biosecurity practices to reduce the risk of disease. Candidates will be required to be familiar with legislation relating to biosecurity. This unit will also cover contingency planning to prepare individuals to react accordingly during times of animal disease emergency.

On completion of the Unit the candidate should be able to:

1. Explain the term biosecurity and describe the benefits of good biosecurity practice.
2. Recognise signs of good health and explain health implications of endemic livestock diseases.
3. Develop an animal health plan which includes control and prevention of disease.
4. Outline relevant legislative requirements for animal health.
5. Outline animal disease emergency preparedness.

Credit value: 1.0 HN Credit at SCQF level 7: (8 SCOTCAT credit points at SCQF level 7*)

**SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to doctorates.*

Recommended prior knowledge and skills Candidates should have an interest in improving animal health and welfare and a desire to improve overall business productivity. It would be beneficial if candidates had previous practical livestock experience, but it is not essential. Where candidates have had such practical experience, the unit will provide the opportunity to learn new skills and enhance existing knowledge and ability.

Core skills: There may be opportunities to gather evidence towards core skills in this Unit, although there is no automatic certification of core skills or core skills components.

General information for centres (cont)

Context for delivery: Biosecurity and Animal Health Planning is offered as a half credit unit. In the future, it is hoped that this unit will be included in the framework for HNC and HND group awards and used as part of other qualifications such as Scottish Progression Awards. It can also be delivered as a free-standing unit.

If this Unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

Assessment: Reports and a presentation could assess the learning outcomes from this unit.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Explain the term biosecurity and describe the benefits of good biosecurity practice.

Knowledge and/or skills

- A clear understanding of what is meant by biosecurity.
- Financial implications that disease has upon businesses (farms, tourism and other rural businesses).
- The importance of following biosecurity measures at all times.
- An introduction to the benefits of good biosecurity practice.

Evidence requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- Describe what is meant by biosecurity, the importance of following biosecurity measures, the benefits of good biosecurity practice and financial implications that disease has upon business. This will include a report that will combine Outcomes 1, 2 and 3.

Assessment guidelines

There may not be a requirement to issue formally an assignment for this introductory part of the Biosecurity and Animal Health Planning unit and candidates can be assessed on this learning outcome in conjunction with other outcomes in this unit.

Higher National Unit specification: statement of standards (cont)

Unit title: Biosecurity and Animal Health Planning

Outcome 2

Recognise signs of good health and explain health implications of endemic livestock diseases.

Knowledge and/or skills

- Recognition of signs of good health in livestock animals.
- Awareness of the early signs of disease and the immediate action to take.
- An understanding of the animal health and welfare issues brought by disease.
- Knowledge of important notifiable livestock diseases.
- Knowledge of important zoonotic diseases.
- Knowledge of important endemic diseases.
- Financial and productivity implications associated with exotic and endemic diseases.

Evidence requirements

Candidates will need evidence to demonstrate their skills and/or knowledge by describing the signs of good health in livestock, early signs of disease and immediate action to take, and animal health and welfare issues brought by disease. The candidate must also demonstrate knowledge of important zoonotic and endemic disease and describe the financial and productivity implications associated with them. This will be included in a report that will combine Outcomes 1, 2 and 3.

Assessment guidelines

There may not be a requirement to issue formally an assignment for this introductory part of the Biosecurity and Animal Health Planning unit and candidates can be assessed on this learning outcome in conjunction with other outcomes in this unit.

Outcome 3

Develop an animal health plan which includes control and prevention of disease.

Knowledge and/or skills

- An understanding of the practical applications of the key biosecurity practices to reduce the risk of disease occurring or spreading to other animals.
- Knowledge of the essential elements in creating an animal health plan.

Evidence requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can demonstrate application of learning Outcomes 1 to 3. This would be best demonstrated with the production of an animal health plan in the form of a report, which will also define the practical applications of key biosecurity practices to reduce the risk of disease occurring or spreading to other animals.

Higher National Unit specification: statement of standards (cont)

Unit title: Biosecurity and Animal Health Planning

Assessment guidelines

Candidates will be required to produce a report that will focus on an exotic or endemic disease. Through this report, the candidate will demonstrate knowledge of recognising signs of good health in animals. In addition, the candidate will be aware of the early signs of the named disease in their report. Students will also show that they are aware of the key biosecurity practices to reduce the risk of disease occurring or spreading to other animals. The report will also include an awareness of the potential effect that these diseases can have upon public and animal health and welfare, and the implications for business productivity.

Outcome 4

Outline relevant legislative requirements for animal health.

Knowledge and/or Skills

- The legal requirement to notify the local Animal Health Divisional Office at the first sign or suspicion of a notifiable disease.
- Awareness of the legal requirements during a disease outbreak, such as FMD (Restriction of movement measures etc).
- Familiarity with the legal requirements relevant to farm businesses.
- Knowledge of current legislation concerning high profile issues, e.g. fallen stock, animal identification and traceability.
- An understanding of the food production regulations

Evidence Requirements

Elements of this outcome can be combined with outcome 5.

Assessment Guidelines

There may not be a requirement to issue formally an assignment for this learning outcome as candidates can be assessed in conjunction with outcome 5.

Outcome 5

Outline animal disease emergency preparedness.

Knowledge and Skills:

- Awareness of the early signs of disease and the immediate action to take.
- Importance of additional biosecurity measures.
- Awareness of the legal requirements imposed during disease outbreaks.
- Techniques used to reduce the impact of disease on individual and other businesses.

Higher National Unit specification: statement of standards (cont)

Unit title: Biosecurity and Animal Health Planning

Evidence Requirement

Candidates will work in groups to produce their own response plan for a given example of disease outbreak.

The response plan will demonstrate the candidate's knowledge of legal requirements relevant to farm businesses, at the first sign of disease and during a disease outbreak, current legislation concerning high profile issues and food production regulations. Each group will be required to do a presentation. The development of a contingency plan is intended to bring together all the knowledge acquired from all five Learning Outcomes.

Administrative Information

Unit code: Biosecurity and Animal Health Planning

Unit title: DE2H 34

Superclass category: SH

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Higher National Unit specification: support notes

Unit title: Biosecurity and Animal Health Planning

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

The breakdown of this is suggested below:

Outcome 1	2 x 2 hour lectures 2 x 2 hour visits or 1 x 2 hour visit to commercial dairy, pig or poultry unit to see biosecurity in practice and/or a visit to an associated industry venue, such as a livestock market	8 hours
Outcome 2	4 x 2 hour lectures; plus 4 hour practical on recognising signs of good health	12 hours
Outcome 3	3 x 2 hour lectures; 4 hour practical on animal health planning (on farm risk assessment and application)	10 hours
Outcome 4	2 x 3 hours lecture	6 hours
Outcome 5	2 x 2 hours lecture	4 hours

Guidance on the content and context for this Unit

The unit is primarily intended for candidates who have come from school to study towards an HNC or HND award and who plan to embark in a career in agriculture or a related industry, where knowledge of biosecurity and animal health planning is advisable. This unit is also applicable for those currently employed in the agricultural sector or an associated industry, who wish to take it as a free-standing unit as part of their continual personal development.

By teaching this unit, the aim is to increase the student's awareness of the importance of biosecurity in reducing the risk of disease occurring or spreading. Also, to enable the student to recognise the early signs of disease and to follow the appropriate steps to minimise its potential spread, in association with professional veterinary advice.

Outcome 1 introduces biosecurity and should provide a clear understanding of what is meant by biosecurity. The benefits of following good biosecurity should also be highlighted. Emphasis should be placed on the potential effects that not following biosecurity could have on animal health and welfare and productivity and associated financial implications. Health implications of livestock disease are also covered in outcome 2, so in the first instance, this advice should act by way of introduction. Learning from outcome 1 will be applied as candidates progress through the unit. A visit to a commercial dairy, pig or poultry unit is suggested, so that candidates can observe good biosecurity in practice. In addition, a visit to a market could be organised.

Higher National Unit specification: support notes (cont)

Unit title: Biosecurity and Animal Health Planning

In outcome 2, candidates will receive instruction on recognising signs of good health in animals. The importance of good health should be stressed, in terms of improved animal health and welfare; increased business productivity; greater economic value of animals and as helping to strengthen the UK's health status and position within the export markets. A practical session is suggested as a way of reinforcing signs of good health and students should be aware of good health indicators such as:

- Temperature range.
- Eyes.
- Coat / skin condition.
- Condition score.
- Behaviour: appetite, alertness, etc.
- Healthy mucous membranes.
- Hydration status.
- Urination.
- Defecation.
- Productivity – e.g. milk yield.
- Weight.

Outcome 2 will also equip candidates with knowledge of the early clinical signs of important notifiable zoonotic and endemic livestock disease and instruction on how to respond during a disease situation.

In outcome 3, candidates will receive instruction on how to plan to avoid disease. The benefits of creating an animal health plan will be stressed. A practical session is recommended to reinforce the importance of health plans and to allow students to apply their knowledge of assessing and managing disease risks on the farm.

The key biosecurity practices will be covered, as listed in “Codes of Recommendations for the Welfare of Livestock: Animal Health and Biosecurity”.

In outcome 4, candidates will receive instruction highlighting the legal requirements of livestock owners. Candidates will also be equipped with the legal requirements associated with a notifiable disease outbreak. In addition, as appropriate, teaching should cover the legal considerations associated with food production within dairy and meat industries.

Outcome 5 will tie a lot of aspects together as candidates receive instruction on animal disease emergency preparedness. Teaching should provide candidates with the ability to recognise the early signs of disease and respond accordingly. Outcome 5 will reinforce the legislative requirements and stress the importance of disease surveillance and rapid response in reducing the impact of disease on individual and other businesses.

Higher National Unit specification: support notes (cont)

Unit title: Biosecurity and Animal Health Planning

Guidance on the delivery and assessment of this Unit

This unit is likely to form part of a group award in agriculture or related subject (for example, equine studies, land management). It will initially be available as an optional unit, but should quickly become a core unit within the HNC and HND awards. Visits should be carried out as appropriate and exclusion time limits observed.

Open learning

In the future, this package will be also available as distance learning, CD-Rom package.

Special needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).

General information for candidates

Unit title: Biosecurity and Animal Health Planning

This unit is designed to increase your awareness of the importance of biosecurity in reducing the risk of disease occurring or spreading mainly in livestock animals. Also, to enable you to recognise early signs of disease and to follow the appropriate steps to minimise its potential spread, in association with professional veterinary advice. Biosecurity is recognised within farm assurance schemes and is an important component of good stockmanship. There will be visits to commercial unit(s) to see effective biosecurity in practice.

This unit will highlight the benefits associated with following biosecurity, namely:

- Improved animal health and welfare.
- Increased business productivity.
- Greater economic value of animals.
- Strengthens the UK's health status and position in export markets.

You will receive instruction on recognising signs of good health in animals. In addition, you will gain knowledge of the early clinical signs of important notifiable zoonotic and endemic livestock disease, and be equipped to quickly respond during a disease situation. You will learn the important components of animal health planning and will be able to identify and reduce potential disease risks.

In order to complete this unit successfully, you will be required to achieve a satisfactory level of performance in a series of assessments. These will include a report and a group presentation.