

## **3345 Principles of microbiology and parasitology in meat production**

**SQA Unit Code**

**H651 04**

**Level 4**

**SCQF Level 10**

**SCQF Credit value 6**

### **Unit Summary**

This unit is about the principles of microbiology and parasitology in meat production. This includes understanding how bacteria, fungi and parasites develop and grow and how their impact can be controlled.

This unit is for you if you work in a supervisory or team leader role within an abattoir or meat processing operation and are involved in the butchery of meat or poultry.

In order to be assessed as competent in this understanding you must demonstrate to your assessor that you understand the requirements set out below in the context of performance in the workplace.

Evidence of knowledge and understanding can be collected during observation of performance in the workplace. Where it cannot be collected by observing performance, other assessment methods should be used.

You need to know and understand:

1. Examples of diseases of red and white meat livestock species caused by bacteria, viruses, fungi and parasites
2. What is meant by the term 'zoonotic disease'
3. Which livestock diseases can also cause disease in humans, including those which are notifiable
4. The structure of bacteria, fungi and viruses
5. How bacteria, fungi and viruses grow and multiply
6. The conditions necessary for the optimal growth and multiplication of bacteria, fungi and viruses
7. The life cycles of representative bacteria, fungi and viruses
8. The significance of spore and toxin formation in bacteria to human health
9. The life cycles of representative parasites to include examples of endo-parasites, ecto-parasites, direct life cycles, and indirect life cycles
10. How parasites can infect their hosts and spread between hosts
11. The potential sources and reservoirs of infection in lairage and in meat plants

12. How poor practice in lairage and in meat plants can increase the risk of infection and spread of disease

13. How good practices in lairage and in the meat plant can reduce the risk of infection

Evidence of performance may employ examples of the following assessment:

- observation
- written and oral questioning;
- evidence from company systems (e.g. Food Safety Management System)
- reviewing the outcomes of work
- checking any records of documents completed
- checking accounts of work that the candidate or others have written