



Empowering & Inspiring Excellence

Company Registration No. 2014/063827/07

Listeria Prevention and Control including Implementation of Good Manufacturing Practices (GMP) in Food Processing and other Food Handling Facilities.

CPD Points: 17 General CEUs

Overview

The impact of microbiological contamination in products is huge, particularly in terms of risk to public health. South Africa experienced the largest documented listeriosis outbreak ever recorded in the world with more than 1060 confirmed cases and about 216 deaths between 01 January 2017 and 17 July 2018, according to the Centre for Enteric Diseases and Division of Public Health Surveillance and Response (http://www.nicd.ac.za/wp-content/uploads/2018/07/Listeriosis-outbreak-situation-report-_26July2018_fordistribution.pdf). This course has been designed for food manufacturers and organizations who need to understand and gain skills in preventing and controlling Listeria and implement Good Manufacturing Practices (GMP) in their food processing plants.

Listeria monocytogenes is a foodborne pathogenic bacterium that causes listeriosis, a disease that can cause severe illness and death to humans. The majority of listeriosis cases are mild, and the most common form of clinical disease is an acute, self-limiting gastroenteritis which presents with fever and diarrhea. Severe Listeria infections are more common in pregnant women leading to miscarriages, stillbirths or premature delivery and can also cause life-threatening disease in people over 65 years old, immune compromised people and newborn infants causing meningitis and death.

Listeria is naturally found in the environment and commonly occurs in soil, water, vegetation and in the faeces of some animals. It can contaminate a wide variety of food types, including meat and meat products, dairy products (unpasteurised and pasteurised), fresh and frozen produce (fruits, vegetables and sprouts) and ready-to-eat products. Due to its growth characteristics the bacteria thrives in cold temperatures in the food processing plants and its control and eradication should be targeted to specific areas and food products that promote its survival and growth. Hence microbiological knowledge of ingredients, raw materials, products, processes, storage condition; and sources and prevention of cross-contamination is important in producing safe and quality products. FoodBev Consulting International Company has designed this course to provide training specifically targeted at preventing and controlling Listeria. This course will enable companies to implement targeted preventative and control measures based on Good Manufacturing Practices (GMP), Cross

Contamination prevention and Good Hygiene Practices (GHP) to prevent the growth and spread of *Listeria monocytogenes* in the processing plants. Participants will acquire skills to apply good practices throughout the acquisition of raw materials, production processes, storage of finished products and transportation. Microbiological testing methods and interpretation of results for *Listeria monocytogenes* are included in this course. The course is designed to improve the generation of relevant microbiological data and to prevent microbiological related manufacturing failures.

Course Objectives (Expected Outcomes)

To give an awareness and knowledge of the risks associated with *Listeria* contamination in foods and to equip participants with skills required to identify, risk assess and control *Listeria* contamination and ensure manufacture of quality and microbiologically safe products. On completion of the course, participants will;

- Understand the food pathogens that can contaminate food e.g. *Listeria monocytogenes*, *Salmonella*, *E.coli* O157:H7, *Staphylococcus*, *Clostridium perfringens*, *Clostridium botulinum*, *Bacillus cereus* and *Campylobacter*.
- Recognize sources of *Listeria* and routes of contamination in most sensitive foods
- Have knowledge and skills to control *Listeria* contamination
- Select relevant test methods for *Listeria* testing, interpreting test results and reporting
- Investigate and solve *Listeria* related problems
- Develop food safety behaviours with manufacturing environment.

Course content

- Basic Food Microbiology
- Over-view of most sensitive foods that are prone to *Listeria* contamination
- Pathogenic bacteria, factors contributing to growth and survival.
- Sources of *Listeria* in sensitive foods such as ready to eat foods, dairy and fresh produce
- Reservoirs of *Listeria* in the facility – non-food contact and food-contact surfaces
- Potential niche sites for *Listeria monocytogenes* in the processing plant
- Factors affecting growth of *Listeria*: Intrinsic and extrinsic growth factors
- Characteristics of *Listeria* including incubation period
- *Listeria* poisoning, symptoms, impact on consumers and business
- Control of *Listeria* including storage of ingredients, personal hygiene and ingredient testing
- PRPs, covering GMPs, GHPs and zoning.
- Sources and prevention of cross-contamination
- Surveillance of ingredients and environment
- Hygienic design of equipment
- Cleaning and Sanitation – including practical demonstration
- Sampling, testing for *Listeria* and interpretation of test results
- Laboratory best practices and ensuring validity of test results

- Trouble shooting for Listeria contamination
- Food safety culture and WHO Five Keys to Safer Food

Participants

Production Managers and Supervisors, Operators, Food safety Managers, Food Safety Officers, Food Safety Team Members, Food Inspectors, Quality Assurance/Quality Control Managers, Quality Controllers, Quality coordinators, Engineering, Purchasing, Retail, Distribution and Warehousing Managers and supervisors.

Assessment

- Pre-course assessment of prior knowledge and understanding of basic food safety and Good Manufacturing practices (GMP).
- Formative assessment through quizzes, workshop discussions and case studies
- Summative assessment may be given at the end of the course.
- Full attendance of the course is essential for a certificate to be issued
- Assessment after two weeks- to evaluate impact of training

Entry requirements

- Basic understanding of English and be able to read and write

Course Duration: 3 days

A half day to 1 day course in local language on Basic Food Safety, Personnel Hygiene and 5 Keys to Food Safety can be arranged for general (shop floor) staff.

Training Dates to be confirmed

Schedule

DAY 1

Provide understanding and knowledge of food safety hazards, their sources and the implication of failing to control them including awareness in basic food microbiology.

- Food safety hazards, nature and variety and implication on food safety
- Sources, vehicles and routes to contamination
- Basic Food Microbiology
- Food poisoning organisms and Food Pathogenic bacteria that you should know about and their symptoms including symptoms of Listeriosis
- Listeria poisoning, symptoms, impact on consumers and business
- What you should remember about bacteria including how bacteria multiply

- Characteristics of Listeria including incubation period
- Pathogenic bacteria, factors contributing to growth and survival.
- Implications of failing to control food safety hazards- Results of making unsafe foods

Day 2

Provide understanding and gaining skills to identify sources of Listeria monocytogenes contamination of foods and their control

- Factors contributing to contamination of foods
- How do we make safe food
- An overview of Pre-requisite Programmes (PRPs) for food safety systems, covering concepts of Good Manufacturing Practices (GMPs), Good Hygienic Practices (GHPs) and zoning in prevention and control of food safety hazards
- Overview of sensitive foods that are prone to Listeria contamination
- Sources of Listeria in sensitive foods such as ready to eat foods, dairy and fresh produce
- Reservoirs of listeria in the facility – non -food contact surfaces
- Potential niche sites for Listeria monocytogenes
- Factors contributing to Listeria contamination of foods
- Factors affecting growth of Listeria in food: Intrinsic and extrinsic growth factors
- Control of Listeria including sources and storage of ingredients, personal hygiene and ingredient testing
- Supplier evaluation and audits
- Hygienic design of equipment
- Cleaning and Sanitation
- Surveillance of ingredients and environment

Day 3

Sampling and testing for Listeria monocytogenes, trouble-shooting Listeria contamination and a factory tour (to be organised by client) to identify contamination routes and discuss corrective actions and best practices

- Line walk to identify contamination risk areas
- Hygienic design
- Sampling, testing for Listeria and interpretation of test results
- Trouble shooting for Listeria contamination
- Development of Listeria prevention and control procedures
- Management of Listeria safety management systems
- Food safety culture and WHO Five Keys to Safer Food

Cost

Cost per delegate	Group of three or more	In-house for 5 or more**
R 6 900	R 6 300	R 6 000

Training can be arranged **in-house for 5 or more participants at a **discounted** price per delegate and this has an added advantage of practical application at the learner's workplace. The training venue, teas and lunch will need to be provided by the client.

Venues

In-house at client premises.

Public Training

Durban: Three Cities, Urban Park Hotel, 60 Meridian Drive, Umhlanga Ridge.

Johannesburg: City Lodge Hotel Cnr Hill Str & Rivonia, Morningside, Sandton

Pretoria: Protea Hotel Manor Hatfield, 1050 Burnett Street Entrance on Festival Street, Hatfield, 0083 (5 minutes-walk from Gautrain Hatfield Station)

Cape Town: City Lodge Hotel Victoria & Alfred Waterfront - Corner Dock and Alf

For Further Information on our training courses, or to register for a course, please contact us on:

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