

MBAA Task Force for Food Safety in the Brewing Industry Introduction to HACCP

What is HACCP?

HACCP stands for Hazard Analysis and Critical Control Point (HACCP). It is a scientific, systematic and preventive approach to identifying, analyzing and controlling significant food safety hazards within a food production system from raw material acquisition through to consumption of a finished product. Significant food safety hazards may cause illness or injury to a consumer if not controlled. HACCP categorizes food safety hazards as follows:

- Biological Hazards include microorganisms such as bacteria, viruses, yeasts, molds, parasites and protozoa with the potential to cause disease in humans resulting in food safety and public health concerns (e.g., *Salmonella* species).
- Chemical Hazards include toxic substances and any other chemical agents that may render a food unsafe for consumption (e.g., Mycotoxin).
- Physical Hazards include foreign material which can cause physical injury to a consumer (e.g., broken glass).

HACCP is implemented in a series of five preliminary steps and seven principles. The preliminary steps allow a site to collect information about the product and process in order to begin the HACCP study:

- Step 1. Assemble HACCP Team
- Step 2. Describe product and its distribution
- Step 3. Describe the intended use and consumers
- Step 4. Develop flow diagram
- Step 5. Verify flow diagram

The seven principles of HACCP allow a facility to undertake a detailed study of the product and the production process from reception of the raw materials through to the distribution of the finished product in order to identify existing or needed food safety control measures to control food safety hazards. The control measures may be those classified as Good Manufacturing Practices (GMPs) or in the case of breweries, Good Brewing Practices (GBPs) or they may be targeted to a specific steps in the process in order to eliminate a specific food safety hazard or bring it under control to an acceptable level. The seven principles of HACCP are implemented as follows:

- Principle 1. Conduct a Hazard Analysis
- Principle 2. Determine CCPs
- Principle 3. Establish Critical Limits for each CCP
- Principle 4: Establish a Monitoring System for each CCP
- Principle 5. Establish Corrective Actions
- Principle 6. Establish Verification Procedures
- Principle 7. Establish Record Keeping and Documentation Procedures

Under United States law, HACCP is required for facilities that manufacture meat and poultry products (as per United States Department of Agriculture, USDA), juice products and those that manufacture and hold seafood (as per US Food and Drug Administration, FDA). HACCP principles have been integrated into the FDA's Food Safety Modernization Act (FSMA). HACCP is widely used within the food industry as a requirement for supplier-customer purchasing relationships. HACCP has also been integrated into customer audit requirements and food safety management system requirements (e.g., BRC, FSSC 22000 and SQF).

There are many auditing agencies which provide third party, independent audits against HACCP.

How Does HACCP apply to Breweries or the Beer supply chain?



HACCP is designed to be very general and does not address the specific details food beer or spirit manufacture. Any entity which manufactures beer, spirits, ingredients, direct-contact packaging materials or provides services to the beer supply chain can implement and be certified to HACCP.

Can I get help with understanding and implementing HACCP for brewery operations in North America?

MBAA runs a regular offering of their HACCP training course for brewery operations. Click <u>HERE</u> to learn more about our upcoming training session.

Where can I get more information about HACCP?

Information about HACCP is available on the FDA website.