The Northern Territory
Food Business Risk
Classification Framework

|  |  |
| --- | --- |
| **Document title** | The Northern Territory Food Business Risk Classification Framework |
| **Contact details** | Public Health Directorate, (08) 8922 7152, PublicHealthDirectorate.DoH@nt.gov.au |
| **Approved by** | Dr. Christine Connors, Chief Health Officer |
| **Date approved** | October 2019 |
| **Document review** | Annually |
| **TRM number** | EDOC2019/8503 |

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Changes made |
| 1.0 | May 2019 | Tracy Ward | First version, approved under section 135(1) of the *Food Act 2004* |
| 2.0 | October 2019 | Sean Bourke | Adaptations for NT requirements |
| 3.0 | March 2021 | Sean Bourke | Modifications after use |
| 4.0 | March 2023 | Stuart McLay | Addition of FSM information |

This document has been developed from The South Australian Food Business Risk Classification November 2018 used with the kind permission from SA Health, Government of South Australia.

|  |  |
| --- | --- |
| Acronyms | Full form |
| NT | Northern Territory |
| NTG | Northern Territory Government |
| DoH | Department of Health |
| PHD | Public Health Directorate |

Contents

[1. Overview 4](#_Toc23769243)

[2. Definitions 5](#_Toc23769244)

[3. Determining the risk classification 7](#_Toc23769245)

[4. Risk classification – Retail 8](#_Toc23769246)

[5. Risk classification – Food service 11](#_Toc23769247)

[6. Risk classification – Processor/Manufacturer 13](#_Toc23769248)

[7. Risk classification – Food transporter 21](#_Toc23769249)

[8. Quick reference guide 23](#_Toc23769250)

[9. High, medium and low risk foods 24](#_Toc23769251)

[10. References 25](#_Toc23769252)

# Overview

The Food Regulation Standing Committee (FRSC) and later the Australian Government Productivity Commission endorsed a national risk profiling tool, the Risk Profiling Framework (the Framework). The Framework is located on the Food Regulation Website at: <http://www.health.gov.au/internet/fr/publishing.nsf/Content/risk-profiling-framework>.

The Framework is a series of decision trees, with supporting documentation to assist its use. The approach in the decision tree is to consider the nature of the potential risk from products sold by the business sector and considering both the inherent risk (i.e. in the absence of existing controls) and the reliability of existing risk management actions i.e. managed risk, and whether there are steps that are susceptible to introduction of hazards, or processes that are critical to the safety of the product at the time it is consumed.

The result from using the Framework is a classification of food businesses or industry sectors into one of four classifications, from the highest risk category of Priority 1 (P1) through P2 and P3 to the lowest risk category of P4.

|  |  |
| --- | --- |
| Priority 1 | Priority 2 |

This classification relates to business sectors that will, characteristically handle foods that support the growth of pathogenic micro-organisms and where such pathogens are present, or could, from experience or literature reports, be expected to be present. Their handling of food will characteristically, also include at least one step at which control actions must be implemented to ensure the safety of the food. Priority 1 business sectors are further characterised by known risk- increasing factors, such as potential for inadequate/incorrect temperature control (e.g. reheating or hot holding foods), a consumer base that includes predominantly immunocompromised populations, the scale of production/service and other factors as identified in the National Risk Validation Project (FSA & ME 2002).

|  |
| --- |
| Priority 3 |

This classification relates to business sectors that will only handle medium risk or low risk foods. A medium risk food is one that may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain or that – may contain pathogenic micro-organisms but will not normally support the formations of toxins or growth due to food type or processing but may support the formation of toxins or growth of pathogenic micro-organisms.

|  |
| --- |
| Priority 4 |

Business sectors that will normally handle only low risk foods, i.e. those that are unlikely to contain pathogenic organism and will not support their growth, and will not introduce microbial, physical or chemical hazards to the foods they sell or handle.

# Definitions

|  |  |
| --- | --- |
| Term | Definition |
| **Catering event** | Involves the provision of food, under an agreement where the food is predetermined in type and quantity, for a predetermined group of persons, and served at a predetermined date and time. |
| **Cold -holding** | Previously prepared ready-to-eat food, stored cold ≤ 5°C. |
| **Cook-chill** | A catering process whereby meals or meal components are fully cooked then cooled by controlled chilling (e.g. blast chilling) and subsequently stored at a temperature above freezing point (e.g. 3°C) prior to regeneration and/or service. The meals are expected to be reheated prior to consumption. These foods are not sterile and their safety is based on a combination of:* a minimal heat treatment (usually at 70 – 75°C) intended to minimise loss of sensory and nutritional quality product information
* refrigerated storage
* limited shelf-life
* packaging systems (e.g. vacuum or modified atmosphere packaging); and
* the intrinsic properties of the foods (such as reduced pH or water activity)
 |
| **Food business** | A business, enterprise or activity (other than primary food production) that involves:* the handling of food intended for sale; or
* the selling of food.

This is regardless of whether the business, enterprise or activity concerned is of a commercial, charitable or community nature or whether it involves handling or selling food on one occasion only. |
| **Food premises** | Includes land (whether or not vacant), the whole or any part of a building, tent, stall or other structure (whether of a permanent nature or temporary nature), a pontoon and a vehicle (other than a food transport vehicle that is engaged in the transport of food). |
| **Food service business** | Businesses that make and/or serve food for consumption on site, taken away for immediate consumption, or at a catering event (may include transport). |
| **FSM Category** | This refers to the Food Safety Management Category of the business under FSANZ Food Standard 3.2.2A – Food Safety Management Tools. This category determines what food safety management tools need to be implemented by the business to manage the risk associated with food handling practices. |
| **Handling** | In relation to food, including making, manufacturing, producing, collecting, extracting, processing storing, transporting, delivering, preparing, treating, preserving, packing, cooking, serving and displaying food. |
| **High risk foods** | Foods that may contain pathogenic micro-organisms and will support formation of toxins or growth of pathogenic micro-organisms. |
| **Hot-holding** | Previously cooked ready-to-eat food, stored hot ≥ 60°C. |
| **Inherent risk** | Relates to the possibility for a food to contain a hazard that could be present at levels that could cause human illness whether due to the nature of the food itself, or the processing and handling it undergoes. |
| **Low risk foods** | Those foods that are unlikely to contain pathogenic organisms and will not support their growth, and will not introduce microbial, physical or chemical hazards to the foods they sell or handle. |
| **Medium risk foods** | Food that may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain, or that: may contain pathogenic micro-organisms but will not normally support the formation of toxins or the growth of pathogens due to food characteristics; or are unlikely to contain pathogenic micro-organisms due to food type or processing but may support the formation of toxins or growth of pathogenic micro-organisms. |
| **Perishable** | Foods that allow microbial growth and so will eventually deteriorate and spoil. Typically such foods require storage under refrigeration to extend shelf life, i.e. foods that are not shelf stable or are potentially hazardous. |
| **Potentially hazardous foods** | These are foods that meet both of the criteria below:* they might contain the types of food-poisoning bacteria that need to multiply to large numbers to cause food poisoning; and
* the food will allow the food-poisoning bacteria to multiply.

Potentially hazardous food has to be kept at certain temperatures to minimise the growth of any pathogenic micro-organisms that might be present in the food or to prevent the formation of toxins in the food. |
| **Processing** | Means activity conducted to prepare food for sale including cooking, drying, fermenting, pasteurising, preserving and washing, or a combination of these activities. |
| **Processor/manufacturer** | Businesses engaged in the physical or chemical transformation of food, food ingredients, substances or components into new products. Can be sold via wholesaler or direct to business, can include minimal or widespread distribution. |
| **Ready-to-eat food (RTE)** | Food that is normally consumed in the same state as that in which it is sold (without further cooking or preparation) but does not include nuts in the shell and whole, raw, fruits and vegetables that are intended for hulling, processing, peeling or washing by the consumer. |
| **Retail business** | Businesses that sell food to the public which is not processed on site (can include slicing and weighing of delicatessen products and reheating/hot holding of RTE cooked foods).Generally not intended to be consumed on site and can include supermarkets, convenience stores or specialty retail stores (e.g. bakery, butcher). |
| **Small producer** | A business that employs less than 50 people in the “manufacturing” sector or which employs less than 10 people in the “food services” sector. |
| **Transporter** | Businesses engaged in transport or pre-retail distribution activities (particularly importation, wholesaling, wholesale storage and multipurpose wholesalers who distribute not only to retailers but also to restaurants or consumers). |

# Determining the risk classification

## Determine the types of food and processes

1. What are the types of food provided by the business?
	1. List all the food products of the business to assist in classifying the type of the business
2. What types of processes are used by this business?
	1. List all the food processes used by the food business to assist in classifying the type of business
3. What is the highest risk food of the business?
	1. The highest risk food/process of the food business determines the risk classification

## Determine the business sector

1. What is the business sector or business sectors that apply to the food business?
	1. Retail
	2. Food service
	3. Processor / Manufacturer
	4. Transporter

## Assign the risk classification

1. Look at the tables of food risk classification provided.
2. For the sector determined, assign the highest risk food process.
3. If the food business operates across more than one business sector, then the sector that has the highest risk determines the classification from the highest risk category of Priority 1 (P1) through P2, P3 to the lowest risk category of P4.
4. For a food business that is a processor/manufacturer, the size of the processor/manufacturer is also used to determine the risk classification in some categories (as indicated in the tables).

## Change of risk classification

1. Risk classification is set and remains unchanged unless the type of food or processes or business sector changes – it does NOT change based on performance.

# Risk classification – Retail

Food for retail sale – food for sale to the public which is not processed on site (can include slicing and weighing of delicatessen products and reheating/hot holding of RTE cooked foods).

*Generally not intended to be consumed on site and can include supermarkets, convenience stores or speciality retail stores e.g. bakery, butcher.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Food | Description | Examples | Risk Hazard | Comments | FSM Category |
| **Alcoholic beverages*****Packaged*** | Outlets selling alcohol to the public for consumption off the premises. | * Packaged or bottled beer, wine or spirits
* Bottle shop
 | **P4****Chemical** | Products are usually pre-packaged. | N/A |
| **Bakery products** | Retailer of bread and baked goods. Not manufacturing. Does not include bakery products that contain perishable fillings (P2). | * Bakery products that may contain non-perishable fillings (e.g. jam)
* Bread
* Biscuits
* Cakes
 | **P3****Microbial** | May contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogenic microorganisms due to food characteristics. | N/A |
| **Bakery products*****Perishable fillings*** | Baked goods that contain perishable fillings that are not manufactured on the premises but can include reheating. If manufactured on premises the classification becomes P1. See manufacturer category. | * Fresh cream filled cakes
* Custard filled pastries
* Meat pies
* Sausage rolls
* Egg-based fillings
* Egg glazes
 | **P2****Microbial** | Classified P2 on the basis that the retail outlet does not significantly contribute to the safety of the product. Perishable fillings may encourage pathogenic growth. | If the ready-to-eat food is handled unpackaged Category 2.If the food is packaged N/A. |
| **Continental type delicatessen food** | Retailer of products which are high risk, processed (heat or non-heat treated), ready-to-eat, requiring refrigeration or reheating. Can include portioning, slicing and weighing. | * Antipasto
* Caviar
* Cheese
* Cured meats
* Fermented products
* Pâté
* Smoked or pickled products
* Small goods
 | **P2****Microbial** | Many of the foods sold in a delicatessen require refrigeration for control of microbial growth. Prevention of recontamination is critical to the safety of the product sold by the business. | If the ready-to-eat food is handled unpackaged Category 2.If the food is packaged N/A. |
| **High risk food*****Perishable*** | Business that sells, but have not prepared high risk foods. Ready-to-eat, refrigerated storage or reheated / hot-held for sale. Generally packaged. | * Supermarkets that are not processing food
* Sandwiches
* Fresh cut fruit and vegetables
* Pastries containing meat or egg
 | **P2****Microbial** | Many of the foods require refrigeration for control of microbial growth. Prevention of recontamination is critical to the safety of the product sold by the business. | If the ready-to-eat food is handled unpackaged Category 2.If the food is packaged N/A. |
| **Low risk food unpackaged** | Business sells only low risk foods that are unpackaged, may include repacking bulk ingredients into smaller units for sale. | * Bar serving alcohol
* Wine tasting
* Repacking dry ingredients from bulk (e.g. spices, grains, nuts, tea, flour)
 | **P3****Microbial** | Low risk foods only. Potential for physical, chemical or microbial contamination. | N/A |
| **Low risk packaged foods** | Business sells only low risk, shelf-stable, pre-packed foods. | * Newsagent
* Chemist
* Vending machine
* Potato chips
* Soft drinks
* Confectionery (packaged)
 | **P4****Microbial****Chemical** | Low risk foods only, packaging provides protection against recontamination. | N/A |
| **Medium risk food** | Business sells medium risk foods, ready-to-eat, refrigerated storage, generally packaged. | * Hard-frozen ice- cream
* Milk based confectionery
* Yoghurt
* Fresh whole fruit and vegetables
* Single cut fruit and vegetables
* Pasteurised milk
* Dried fruit and nuts
* Health food shops
* Bed and breakfast (providing low- medium risk breakfast supplies only)
 | **P3****Microbial** | May contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogenic microorganisms due to food characteristics. | N/A |
| **Raw meat and poultry** | High risk processed raw meat and poultry, no heat treatment, refrigerated, not intended to be eaten raw. | * Beef
* Lamb
* Pork
* Fresh poultry
* Retail only butcher
 | **P2****Microbial** | Classified P2 on the basis that the retail outlet does not contribute significantly to the safety of the product. | N/A – not selling ready-to-eat food. |
| **Seafood*****Excludes processing of bivalve molluscs*** | High risk processed (raw and heat treated) fish and seafood, refrigerated or frozen storage. Processing of bivalve molluscs onsite becomes P1 (See manufacturer – shell fish processor) | * Crustaceans
* Fish
* Mollusc retailing (including already processed)
* Seafood, fresh or frozen
 | **P2****Microbial** | Classified P2 on the basis that the retail outlet does not contribute significantly to the safety of the product. | If the ready-to-eat food is handled unpackaged Category 2.If the food is packaged N/A. |

# Risk classification – Food service

Businesses that make and/or serve food for consumption on site, taken away for immediate consumption or at a catering event (may include transport).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Food | Description | Examples | Risk Hazard | Comments | FSM Category |
| **Catering*****Offsite activity*** | High risk processed, pre-prepared ready-to-eat food (possible cooling), transported to another location, refrigerated storage, reheating or hot-holding before serving. | * Airline, rail, sea transport
* Motor racing
* Spit roast caterer
* Tour operator
 | **P1****Microbial** | For large catering operations, exposure is relevant. | Category 1 |
| **Catering*****Onsite activity*** | High risk processed, pre-prepared ready-to-eat food. Possible cooling, refrigerated storage, reheating or hot-holding. | * Vulnerable population facilities
* Sporting and major events
* Correctional facilities
* Function centre
 | **P1****Microbial** | Vulnerable population businesses required to comply with Standard 3.3.1 of the Australia and New Zealand Food Standards Code. | Category 1 |
| **Medium risk foods*****Perishable*** | Business that make / serves medium risk foods. Refrigerated storage, ready-to-eat. | * Ice-cream vans
* Popcorn / fairy floss makers
* Coffee vans
* Bubble tea
* Cocktail bar
 | **P3****Microbial****Chemical****Physical** | May contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogenic microorganisms due to food characteristics. | N/A |
| **Restaurant and takeaway*****Ready-to-eat food prepared in advance >4 hours*** | High risk food processed onsite from raw (e.g. cooking), time delay before serving (cooling, hot or cold-holding). Raw preparation allows for cross-contamination risks to be increased. Food can be consumed on the premises, taken away by the customer or delivered. | * Bar
* Café
* Clubs
* Restaurant
* Mobile food operator
* Market stall
* Sushi
* Raw egg sauces
* Laksa
* Charcoal chicken
* Supermarket hot chicken
* Soft serve ice-cream (no in situ pasteuriser)
 | **P1****Microbial** | History of outbreaks where meals are prepared in advance (e.g. *Salmonella* and *Campylobacter*). Hot-holding or poor cooling of foods supporting spore forming pathogen growth identified as a common cause of food-borne disease outbreaks. | Category 1 |
| **Restaurant and takeaways*****Ready-to-eat food express order <4 hours*** | High risk food, processed from raw, direct cook / serve or make / serve operation, intended for immediate consumption. Food can be consumed on the premises, taken away by the customer or delivered. | * Fast food
* Juice bar
* Mobile food operator
* Soft serve ice- cream (in situ pasteuriser)
 | **P2****Microbial** | High risk foods but no hot-holding and no simultaneous servings. Cross-contamination risks still exist from raw preparation onsite. | Category 1 |
| **Restaurant and takeaway*****Ready-to-eat food no raw preparation*** | High risk food, purchased pre-prepared / cooked. Can be held cold or hot for sale and/or consumption. Food intended to be consumed in short time frame. | * Hot dogs/dim sims
* Sandwiches
 | **P2****Microbial** | Could also be covered under P2 retailer of high risk foods if no option to consume onsite. | Category 2 |

# Risk classification – Processor/Manufacturer

Engaged in the physical or chemical transformation of food, food ingredients, substances or components into new products. Can be sold via wholesaler, direct to business or direct to the public. Can include minimal or widespread distribution.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Food | Description | Examples | Risk Hazard | Comments |
| **Bakery products*****Perishable fillings processing*** | Applies to baked goods that contain high risk fillings. Includes fresh and frozen products. *For bakery items (non-perishable) see cereal processing.* | * Cake or pastry
* Pie / pasty (including meat, fruit or vegetable)
* Quiche
* Some ganaches (depends on water activity)
 | **P1****Microbial** | Product requires refrigerated or frozen storage to minimise pathogen growth that remain in the product or a component of the product, and to prevent the formation of toxins. |
| **Beverage processing** | Applies to the processing operations of beverages including alcoholic, carbonated and bottled water. Applies to ice making. Does not include manufacturing of milk and milk products or fruit and vegetable juices. | * Beer
* Wine
* Spirits
* Soft drinks
* Cordial
* Packaged water
* Tonic water
* Wine vinegar
* Kombucha
* Ice making
 | **P3****Microbial****Chemical****Physical** | Carbonated beverage processing and acidity means pathogens are unlikely to be present or to grow. For alcoholic beverages chemicals that cause acute illness (methanol) are unlikely. Physical contamination is the greatest risk associated with ice making as frozen water does not support microbial growth. |
| **Beverage processing*****Small producer*** | Applying to small businesses producing fermented beverages. | * Kombucha
* Water-based and nut-based kefirs
* Rejuvelac
* Kvass
* Fermented sodas
 | **P3****Chemical** | Acidity means pathogens unlikely to grow – if pH is too low injury may occur to the oesophagus. Uncontrolled fermentation or secondary fermentation may increase alcohol in breach of the Food Standards Code and other legislation. |
| **Canned food processing** | Preparing food (including processing) by heat in an appropriate manner before or after hermetically sealing the food in a container to prevent spoiling. The commercial sterilisation of fish, meats, fruits and vegetables, soups and sauces, in metal or glass containers or retort pouches. Includes baby food in jars. | * Cans
* Bottles
* Sterile retort pouches
* Pasta in jars
* Baby food in jars
* Canned egg custard
* All low acid foods (pH >4.5)
 | **P2****Microbial** | Canned foods are usually heat treated to be stored indefinitely at ambient temperature. The heat process is dependent on the pH of the food. Unopened, heat treated canned foods are not potentially hazardous. |
| **Canned food processing*****Very small producer and high acid food*** | Very small producer of high acid product. The size and type of food may be used to alter the risk classification. | * Few kilograms per week of canned tomatoes
 | **P3****Microbial** | Classified P3 due to size of business and type of food. |
| **Cereal processing and medium / low risk bakery** | Bread manufacturing. Biscuit manufacturing. Flour and starch products manufacturing. Includes arrowroot, rice, corn, barley, malt, wheat etc. Also includes pulses / legumes. Cereal, pasta and baking mix manufacture. | * Bread
* Baking powder
* Breakfast cereal
* Cake mix
* Coatings
* Custard powder
* English muffin
* Glucose, gluten
* Ice-cream cone
* Dry noodles
* Pasta, dried or fresh
* Pastry mix
* Semolina
* Un-popped popcorn
* Perishable fillings if validated as shelf-stable
* Shelf-stable cakes
* Shelf-stable cake decoration / fillings / icings
 | **P3****Microbial****Chemical** | Processing, baking and low water activity means pathogens unlikely to be present or to grow. Decorations, fillings and icings that have a low water activity do not support the growth of pathogens. Physical contamination to be considered when repackaging flours or dried grains. |
| **Chocolate processing** | A large manufacturer of chocolate and similar confectionery. | * National producer
 | **P2****Microbial** | The size of the chocolate manufacturer determines the classification level. Raw ingredients can introduce contamination to finished product. |
| **Chocolate processing*****Small producer*** | Small businesses making chocolates. | * Local producer of chocolate
* Home-businesses
* Carob producer
 | **P3****Microbial** | Classified P3 due to size. Less risk due to distribution. |
| **Confectionery processing** | Sweets / sugar confectionery. High sugar spreads / condiments. High sugar snack foods. | * Chewing gum
* Crystallised or glace fruit
* Liquorice
* Marshmallow
* Candied nuts
* Popcorn – candied
* Jams, conserves, spreads
* Honey packing
* Protein / bliss balls with high sugar syrup or dried fruit content
* Carob products
 | **P3****Microbial** | Low water activity and processing mitigates against microbial contamination or growth. Low water activity of protein balls due to the amount of sugar syrups and dried fruit added to bind them. |
| **Cook-chill food*****Extended shelf-life processingNon-aseptic*** | Cook chill - Extended shelf-life (ESL) means food that is given a cooking process equivalent to 90°C for 10 minutes. Has a refrigerated shelf-life of more than 10 days if validated. | * Pre-prepared meals
* Pre-prepared pasta
* Pre-prepared rice
* Pre-prepared soups and sauces
* Baby food
 | **P1****Microbial** | This process delivers a 6 log reduction of non-proteolytic *Clostridium botulinum*. Evidence of pathogens in long shelf-life cook-chill products in Australia has increased due to inadequate process controls used by inexperienced operators. Potential for recontamination during packing. |
| **Cook-chill food*****Short shelf-life processing*** | Cook chill - Short shelf-life perishable foods which have undergone a mild heat or pasteurisation process (generally equivalent to 70°C for 2 minutes). Has a refrigerated shelf-life of no more than 10 days at ≤ 5°C including the days of production and consumption. | * Pre-prepared meals
* Pre-prepared pasta
* Pre-prepared rice
* Pre-prepared soups and sauces
 | **P1****Microbial** | This process delivers a 6 log reduction in Listeria monocytogenes. Cold chain for chilled transport and storage unreliable with significant potential for microbial growth or recontamination. Generally packaged. |
| **Cook-chill food*****Extended shelf-life processingAseptic packaging*** | Cook chill - Extended shelf-life (ESL) means food that is given a cooking process equivalent to 90°C for 10 minutes. Has a refrigerated shelf-life of more than 10 days if validated. | * Pre-prepared meals
* Pre-prepared pasta
* Pre-prepared rice
* Pre-prepared soups and sauces
 | **P2****Microbial** | This process delivers a 6 log reduction of non-proteolytic *Clostridium botulinum*. No evidence of botulism from cook- chill products in Australia where process and risks are well managed and understood. Generally industrial scale manufacturing. |
| **Cook-frozen food processing** | Cook-frozen food means foods which has undergone a mild heat or pasteurisation process and are intended to be frozen with the intent of reheating prior to eating. | * Pre-prepared meals
* Pre-prepared pasta
* Pre-prepared rice
* Pre-prepared soups and sauces
 | **P2****Microbial** | Substantial documented evidence is available to demonstrate that cook-freeze reliably controls pathogens in food in the community. |
| **Dairy processing*****Soft cheese processing*** | A manufacturer or processor of soft and semi- soft cheese (moisture content > 39%) with pH >5.0. | * Brie
* Camembert
* Feta
* Ricotta
 | **P1****Microbial** | Listeria monocytogenes multiplication on soft cheese during long-term cold storage. Cross-contamination risks during processing / handling. |
| **Dairy processing*****Not including soft cheese*** | Includes – milk; cream, butter, buttermilk, margarine, ghee, casein, cheese; whey, cultured milk and yoghurt; ice-cream and ice-cream mix, powdered milk etc. | * Cheese (not soft)
* Condensed milk
* Confections, frozen
* Evaporated milk
* Flavoured milk
* Gelato
* Ice-cream
* Sour cream
* Ultra-heat treatment milk
* Yoghurt
* Dairy kefir
* Probiotic dairy beverages
* Desserts made with milk powder
 | **P2****Microbial** | Pasteurisation is generally considered as reliable and pasteurised milk is considered a medium risk. |
| **Egg processing** | Egg product means the content of the egg, as part or whole, in liquid, frozen or dried form. Processed and pasteurised. | * Fresh shell eggs
* Value added products where egg is the main ingredient
* Basic egg products including whole eggs, whites, yolks and various blends with or without non-egg ingredients
 | **P2****Microbial** | Cracked eggs have a *Salmonella* risk. |
| **Fruit and vegetable juice*****Unpasteurised processing*** | Fruit juice or vegetable juice that has NOT been heat treated to commercial sterility. Product is intended to be kept under refrigerated storage. | * Unpasteurised juice
 | **P1****Microbial** | Unpasteurised juice is a high risk product as it may contain pathogens and support their growth. |
| **Fruit and vegetable juice*****Pasteurisation processingShelf-life stable processing*** | Pasteurised fruit or vegetable juice has undergone a mild heat treatment that will not eliminate all spores, so it requires refrigerated storage. Shelf stable fruit juice and purees have undergone an ultra-heat treatment and therefore do not require refrigeration. Medium or large processor. | * Pasteurised and shelf stable fruit juice, purees and nectars
 | **P2****Microbial** | Pasteurised fruit juice may support the growth of pathogens and toxin formation, but pasteurisation and low temperature storage manage this risk. Shelf stable fruit juice is not potentially hazardous since ultra-heat treatment of the product inactivates vegetative cells and spores. |
| **Fruit and vegetable juice*****Pasteurisation processingShelf-life stable processingSmall producer*** | Pasteurised fruit or vegetable juice has undergone a mild heat treatment that will not eliminate all spores, so it requires refrigerated storage. Shelf stable fruit juice and purees have undergone an ultra-heat treatment and therefore do not require refrigeration. | * Pasteurised and shelf stable fruit juice, purees and nectars
 | **P3****Microbial** | The size if the manufacturer is used to determine risk classification, small manufacturers are classified as P3. |
| **Fruit and vegetable processing** | Ready-to-eat, high risk food: peeling, cutting or combining ingredients to make fruit and vegetable salads or similar products. | * Fruit salad
* Salad tabouli
* Raw processed fruit and vegetables (e.g. mousses, slices)
 | **P1****Microbial** | *Listeria* and *Salmonella* – uncontrolled or potentially unreliable control steps. |
| **Fruit and vegetable processing*****Frozen*** | Manufacturer freezes the produce and is continuously held at – 18°C or below. Includes businesses where: processing includes peeling and slicing; not all products blanched i.e. berries; large volumes are produced. | * Fruit (frozen)
* Vegetable (frozen)
 | **P2****Microbial** | Time / temperature control to limit microbial growth during processing and the blanching process are strong controls against microbial hazards. Frozen storage at less than – 18°C is recommended. |
| **Fruit and vegetable processing*****Frozen blanch, Wash / pack, Dehydrating, Condiments, Small producer*** | Small manufacturers that blanch all products. Small manufacturers that dehydrate fruit and vegetables. Manufacturing low pH / low water activity condiments. Growers that wash or pack low risk whole fruit and vegetables. | * Fruit (frozen)
* Vegetable (frozen)
* Packing low risk fruit and vegetables (e.g. citrus, potatoes, onion, carrots etc.)
* Washing low risk whole fruit and vegetables
* Dehydrating e.g. dried apricots
* Chutney, sauces, relishes
 | **P3****Microbial** | The size of the manufacturer is used to determine the risk classification. Pre-preparation e.g. blanching, peeling of fruit and vegetables may risk dehydrated products. Condiments etc. are usually cooked and hot filled and have low pH / low water activity. |
| **Infant formula processing** | Processor or manufacturer of infant formula. | * Baby formula
* Infant formula
* Follow-on formula
* Lactose free formula
* Low lactose formula
* Pre-term formula
 | **P1****Microbial** | Specifically manufactured for a vulnerable population – can contain *Salmonella* and *Cronobacter sakazakii*. |
| **Meat processing** | Includes boning, packaging, handling and storage of meat. | * Meat packaging and storage
* Lard, tallow rendering
 | **P2****Microbial** | Red meat is considered a high risk food as it may contain microorganisms that are able to grow if temperature is not controlled. |
| **Meat processing*****Fermented meat processingSmallgoods processing*** | Fermented (salami), cured and preserved meats, such as bacon and ham, and manufacturing of smallgoods or prepared meat products not elsewhere classified. | * Bacon
* Corned meat
* Pâté
* Poultry smallgoods
* Salami
* Dried meats
 | **P1****Microbial** | E.coli (EHEC / STEC) in fermented meat products and Listeria in long shelf-life manufactured meat products demonstrate the risk associated. Meats can be cured by salting, drying, pickling or smoking. |
| **Oils and fats processing** | Manufacturing of crude vegetable or marine animal oil, fat, cake or meal, margarine, compound cooking oil or fat, blended table or salad oil or refined or hydrogenated oil or fat. | * Vegetable oil
* Edible oil or fat
* Fish or other marine animal oil
* Lard or tallow, refined
* Margarine
* Olive oil
* Oil based marinades / dressings
 | **P3****Microbial** | Low water activity precludes microbial growth. Safety of marinades and dressing with other ingredients depends on pH <4.6, water activity, cooking or cooling steps. |
| **Peanut Butter and Nut processing** | Peanut butter means a peanut spread containing no less than 850g / kg of peanuts.  | * Peanut butter manufacturing
* Other nut butters and pastes
* Nut processing / packing
 | **P2****Microbial** | *Salmonella* can be eliminated from nuts by roasting however if recontamination with *Salmonella* occurs, the pathogen can survive. Peanut butter does not require refrigeration. |
| **Peanut Butter and Nut processing*****Small producer*** | Peanut butter means a peanut spread containing no less than 850g / kg of peanuts. Small manufacturers are classified P3. | * Peanut butter manufacturing (small or retail premises)
* Other nut butters and pastes
* Nut processing / packing
 | **P3****Microbial** | *Salmonella* can be eliminated from nuts by roasting however if recontamination with *Salmonella* occurs, the pathogen can survive. Peanut butter does not require refrigeration. |
| **Poultry processing** | Preparing and processing, chilling, freezing or packaging (including canning) the whole or selected parts of bird carcasses. | * Frozen poultry manufacturing
* Poultry meat processing and packing
 | **P1****Microbial** | Substantial evidence of failure in the community – residual contamination *Salmonella* and *Campylobacter*. |
| **Prepared****Ready-to-eat food processing** | This food is normally consumed in the same state as which it is sold (i.e. without further cooking or preparation). This is a generic category, if ready to eat food products are classified elsewhere in the table, that risk profile must be used. Refrigerated high risk foods and non- refrigerated medium risk foods included. | * Sandwich / salad manufacturing
* Wet noodles / tofu
* Fresh cut fruit and vegetable processing
* Pesto
* Non-dairy dip / dressing processing
* Non-dairy beverages (e.g. almond milk)
* Food for catering purposes
* Manufactured meats
* Salami
 | **P1****Microbial** | Demonstrated uncontrolled hazard. *Salmonella* in salads. Reheating is generally not regarded as a preparation step. Many RTE foods require refrigeration. For fruit and vegetable processing *Listeria* and *Salmonella* uncontrolled or control steps are potentially unreliable. |
| **Prepared****Not ready-to-eat food processing** | Not-ready-to-eat (NRTE) products are identified as “raw” and require further cooking or preparation by the consumer. Some products may have undergone partial heat treatment. Food requires frozen or refrigerated storage. | * Frozen food meals (e.g. pizzas, pies, TV dinners)
* Marinated, stuffed and / or crumbed meat, fish or chicken
 | **P2****Microbial** | Can contain the presence of pathogens that could cause foodborne illness. These foods are described as requiring frozen or refrigerated storage and are not intended to be consumed without cooking. |
| **Salt and other low risk ingredients / additives processor** | Manufactures salt or similar low risk ingredients or additives. | * Salt production / packing
* Sugar packing
* Food acids (liquids / powder)
* Colours
* Calcium chloride
* Preservatives
* Artificial sweeteners
 | **P3****Physical** | The inherent nature of these products does not support the growth of pathogens. |
| **Seafood processing*****Mollusc processing*** | Bivalve molluscs intended for human consumption. | * Cockles
* Clams
* Mussels
* Oysters
* Pipis
* Scallops
 | **P1****Microbial** | Refer to PP Standard 4.2.1. |
| **Seafood processing** | Includes the filleting, cutting into portions, brining and the packing, treating, washing, freezing, refrigeration or storing of seafood. | * Uncooked fish product
* Whole fish
* Fish fillets
* Reformed fish cakes
 | **P2****Microbial** | Fish fillet and deboning operations do not contribute significantly to microbial food safety. |
| **Seafood processing*****Ready-to-eat and shelf stable*** | Includes smoking, cooking and collecting caviar. It does not include sushi processing or mollusc processing. | * Caviar
* Seafood salad products
* Smoked cooked fish
* Smoked salmon
* Fish sauce
* Canned fish
* Pickled shellfish
 | **P2****Microbial** | Chilled or frozen, requires no further cooking prior to consumption. Shelf stable stored at ambient temperature. |
| **Snack chip processing** | Potato, corn and other crisp manufacturing. | * Corn chip
* Crisp
* Potato Crisp
* Taco, tortilla or tostada shell
 | **P3****Microbial** | Frying and low water activity mitigate against microbial hazards being present or able to grow. |
| **Spice and dried herbs processing** | Manufacturers of dehydrated culinary herbs and spices. | * Dried herbs and spices
 | **P2****Microbial** | Low water activity but may contain heavy microbial load. |
| **Spice and dried herbs processing*****Small producer*** | Small manufacturers of dehydrated culinary herbs and spices. | * Dried herbs and spices
 | **P3****Microbial** | The size of the manufacturer is used to determine the risk classification. |
| **Sprout processing** | Processor of spouts including washing, drying or packing of seed sprouts; chilling and storage of seed sprouts or transport of seed sprouts. Usually sold as ready-to-eat, refrigerated storage. | * Alfalfa
* Fenugreek
* Mung bean
* Pea sprouts
 | **P1****Microbial** | High risk – refer to Standard 4.2.6. |
| **Sushi processing** | Sushi is rice, acidified with vinegar, and usually combined with other ingredients such as raw fish. | * Nigiri
* Gunkan
* Norimaki
* Temaki
* Temakizushi
* Oshizushi
* Inari
 | **P1****Microbial** | Controls include limitation on storage time, storage and display temperature, appropriate cooling and storage of rice to minimise *Bacillus cereus* and acidification to prevent other pathogen growth. P1 based on widespread consumption. |
| **Vegetables in oil and vegetable fermentation processing** | The use of oil, brine, water and vinegar to preserve vegetables. Acidified, submerged in oil etc., ambient or refrigerated storage. Fermentation of vegetables drops the pH. | * Chopped garlic
* Garlic cloves
* Sun-dried tomatoes
* Chilli
* Ginger
* Eggplant
* Capsicum
* Mushrooms
* Olives
* Kimchi
* Sauerkraut
* Marinades containing garlic or other vegetables if pH water activity is unknown / not hot filled
 | **P1****Microbial** | The Food Standards Code requires that this class of product must not have a pH >4.6. Possible acidifying agents include vinegar, acetic acid, citric acid and lemon juice. Risk of spore former / toxin production i.e. *Clostridium botulinum*. |

# Risk classification – Food transporter

Businesses engaged in transport or pre-retail distribution activities (particularly importation, wholesaling, wholesale storage and multipurpose wholesalers who distribute not only to retailers but also to restaurants or consumers).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Food | Description | Examples | Risk Hazard | Comments |
| **Dairy produce distributor** | Mainly engaged in wholesaling dairy produce, ice-cream and other frozen dairy desserts. Does not include distributors of soft cheeses. | * Butter
* Hard cheese
* Cream
* Yoghurt
* Frozen dairy dessert
* Ice-cream
* Milk
 | **P3****Microbial** | Pasteurisation and packaging provide protection against contamination. |
| **Dry goods and beverages distributor** | Business handles only low risk packaged food. Does not repack. Goods are generally solid and do not require refrigeration or freezing.  | * Bottled water
* Canned food
* Cereal food
* Condiments
* Confectionery
* Cooking oil or fats
* Cordial
* Honey
* Infant formula
* Nuts
* Potato chips
 | **P4****Chemical** | Products not likely to support microbial growth. |
| **Frozen food distributor** | Food preserved by freezing and packaged for wholesale distribution. Medium risk foods, large volumes. | * Frozen fruit
* Frozen vegetables
* Frozen fish / seafood
* Frozen ready meals
 | **P3****Microbial** | Cook – freeze reliably controls pathogens in food. |
| **Fruit and vegetables distributor** | Business mainly engaged in wholesaling fresh fruit or vegetables. | * Fresh fruit
* Fresh vegetables
 | **P3****Microbial****Chemical** | Uncut fruit and vegetables unlikely to become contaminated with microorganism or chemicals. |
| **High risk food distributor** | High risk food, generally perishable ready-to-eat, refrigerated storage, packaged product. | * Fresh cut fruits and vegetables
* Ready-to-eat packed foods
* Smallgoods
* Soft cheeses
 | **P2****Microbial** | Prior processing in the supply chain is important for safety. Safety relies on the integrity of the cold chain. Distributor has a responsibility to maintain refrigerated storage. |
| **Medium risk food distributor** | Medium risk foods are those which may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain.Business handles low risk or medium risk food. Includes unpackaged and repackaged food.  | * Salami
* Vegetables stored in oil
* Peanut butter
* Shell eggs
* Milk-based confectionery
* Hard frozen, ice-cream
* Bulk flour
* Water carter (approved source)
 | **P3****Microbial****Chemical** | Distribution does not affect risk. |
| **Processed meat distributor** | Mainly engaged in wholesaling fresh or frozen meat, bacon, ham or poultry. Does not include fermented meats. | * Bacon
* Frozen meat
* Ham
* Meat
* Poultry
* Sausage
 | **P2****Microbial** | Products may harbour pathogens. Temperature control is important to minimise potential for growth. |
| **Seafood distributor** | Mainly engaged in wholesaling fresh or frozen seafood (except canned).Excludes live seafood. | * Crustaceans
* Fish
* Molluscs (including processed)
* Seafood, fresh or frozen
 | **P2****Microbial** | Products may harbour pathogens. Temperature control is important to minimise potential for growth. |

# Quick reference guide

|  |  |  |
| --- | --- | --- |
| Retail sector | Risk | Page |
| Bakery Products - Perishable Fillings | P2 | 8 |
| Continental type delicatessen food | P2 | 8 |
| High risk food - Perishable | P2 | 9 |
| Raw meat and poultry | P2 | 9 |
| Seafood | P2 | 10 |
| Bakery Products | P3 | 8 |
| Medium Risk Food | P3 | 9 |
| Low risk unpackaged | P3 | 9 |
| Alcoholic beverages packaged | P4 | 8 |
| Low risk packaged foods | P4 | 9 |

|  |  |  |
| --- | --- | --- |
| Food service sector | Risk | Page |
| Restaurant and takeaway - Prepared in advance >4hrs | P1 | 11 |
| Catering - Offsite activity | P1 | 11 |
| Catering - Onsite activity | P1 | 11 |
| Restaurant and takeaway - express order <4hrs | P2 | 12 |
| Restaurant and takeaway - no raw preparation | P2 | 12 |
| Medium risk foods - Perishable | P3 | 11 |

|  |  |  |
| --- | --- | --- |
| Processor/Manufacturer sector | Risk | Page |
| Bakery products - Perishable fillings | P1 | 13 |
| Cook-chill food - Extended shelf-life processing | P1 | 15 |
| Cook-chill food - Short shelf-life processing | P1 | 15 |
| Dairy processing - Soft cheese processing | P1 | 15 |
| Fruit and vegetable juice - Unpasteurised processing | P1 | 16 |
| Fruit and vegetable processing | P1 | 17 |
| Infant formula product processing | P1 | 17 |
| Meat processing - Fermented meat processing - Smallgoods processing | P1 | 18 |
| Poultry processing | P1 | 18 |
| Prepared - Ready-to-eat food processing | P1 | 18 |
| Seafood processing - Mollusc processing | P1 | 19 |
| Sprout processing | P1 | 20 |
| Sushi processing | P1 | 20 |
| Vegetables in oil processing - Vegetable fermentation processing | P1 | 20 |
| Canned food processing | P2 | 13 |
| Chocolate processing | P2 | 14 |
| Cook-chill food - Extended shelf-life processing - Aseptic packaging | P2 | 15 |
| Cook-frozen food processing | P2 | 15 |
| Dairy processing - Not including soft cheese | P2 | 16 |
| Egg processing | P2 | 16 |
| Fruit and vegetable juice - Pasteurisation processing - shelf-life stable processing | P2 | 16 |
| Fruit and vegetable processing – Frozen | P2 | 17 |
| Meat processing | P2 | 17 |
| Peanut Butter and Nut processing | P2 | 18 |
| Prepared - Not ready-to-eat food processing | P2 | 19 |
| Seafood processing | P2 | 19 |
| Seafood processing - Ready-to-eat and shelf stable | P2 | 19 |
| Spice and dried herbs processing | P2 | 19 |
| Beverage processing | P3 | 13 |
| Beverage processing - Small producer | P3 | 13 |
| Canned food processing - Very small producer and high acid food | P3 | 14 |
| Cereal processing and medium/low risk bakery | P3 | 14 |
| Chocolate processing - Small producer | P3 | 14 |
| Confectionery processing | P3 | 14 |
| Fruit and vegetable juice - Pasteurisation processing - Shelf stable processing - Small producer | P3 | 17 |
| Fruit and vegetable processing - Frozen blanch, Wash/pack, Dehydrating, Condiments, Small producer | P3 | 17 |
| Oils and fats processing | P3 | 18 |
| Peanut Butter and Nut Processing – Small producer | P3 | 18 |
| Salt and other low risk ingredients/additives processor | P3 | 19 |
| Snack chip processing | P3 | 19 |
| Spice and dried herbs processing - Small producer | P3 | 19 |

|  |  |  |
| --- | --- | --- |
| Food transporter sector | Risk | Page |
| Perishable ready-to-eat, packaged, high risk food distributor | P2 | 19 |
| Processed meat distributor | P2 | 22 |
| Seafood distributor | P2 | 22 |
| Dairy produce distributor | P3 | 21 |
| Frozen food distributor | P3 | 21 |
| Fruit and vegetables distributor | P3 | 21 |
| Medium risk food distributer | P3 | 21 |
| Perishable, packaged, medium risk food distributor | P3 | 19 |
| Dry goods and beverages distributor | P4 | 21 |

# High, medium and low risk foods

This table provides examples of high, medium and low risk foods.

|  |  |  |
| --- | --- | --- |
| Food type | Definition | Example foods |
| High risk food | Foods that may contain pathogenic microorganisms and will support formation of toxins or growth of pathogenic microorganisms. | Any potentially hazardous food –* Raw and cooked meat and poultry
* Seafood (excluding live)
* Cooked rice and pasta
* Dairy products (e.g. custard and cream)
* Sprouted seeds
* Prepared salads
* Cut fruits
* Foods containing eggs (cooked or raw)

Ready-to-eat foods containing any of the above foods (e.g. sandwiches, sushi, laksa) |
| Medium risk food | Foods that may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain; or that: may contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogens due to food characteristics; or are unlikely to contain pathogenic microorganisms due to the food type or processing but may support the formation of toxins or growth of pathogenic microorganisms. | * Whole fresh fruit and vegetables
* Pasteurised milk
* Pasteurised fruit juice
* Canned foods
* Hard frozen ice-cream
* Chocolate
* Yoghurt
* Vegetables in oil
* Mock cream
 |
| Low risk food | Those foods that are unlikely to contain pathogenic organisms and will not support their growth; and will not introduce microbial, physical or chemical hazards to the foods they sell or handle. | * Biscuits and crackers
* Uncooked grains
* Cereals
* Carbonated beverages
* Alcohol
* Fats and oils
* Sugar-based confectionery
* Spices
 |

# References

ANZFA Food Safety: The priority classification system for food businesses. A risk-based system designed to classify food businesses into priority ratings based on the risk they present to public health and safety.

Information paper, Canberra (2001) <http://www.foodstandards.gov.au/publications/Pages/thepriorityclassific352.aspx>

Australian Bureau of Statistics (2006) Australian and New Zealand Standard Industrial Classification

Department of Health and Ageing (Commonwealth) 2007, The Business Sector Food Safety Risk Priority Classification Framework, Canberra. [https://www1.health.gov.au/internet/fr/publishing.nsf/Content/37F08208FAC6F504CA2582A40027AA90/$File/FRSC-RPF2007.pdf](https://www1.health.gov.au/internet/fr/publishing.nsf/Content/37F08208FAC6F504CA2582A40027AA90/%24File/FRSC-RPF2007.pdf)

Draft for Food Regulation Standing Committee (2009) Risk Profiling Framework Example Classifications

FAO (2011) Guidelines for risk categorization of food and food establishments applicable to ASEAN countries

(Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific Bangkok 2011)

Food Standards Agency Food Safety Act 1990 Code of Practice on Food Hygiene Inspections (Code of Practice No. 9 Second Revision October 2000)