

Food Safety Template for Wine makers

This is a pre-evaluated document.

If you add any procedures to this plan, or make any changes to the procedures provided, they must be evaluated.

This is a legal document.

21 June 2018



New Zealand Food Safety

Ministry for Primary Industries
Manatū Ahu Matua

Contents

Setting up

(dark blue cards)

- 4 Introduction
- 6 Business details
- 10 Business layout
- 13 Managing risks nearby
- 15 Taking responsibility
- 21 Places and equipment
- 25 Checking the plan is working well
- 29 Training and competency
- 31 Suitable water

Exporting

(light blue cards)

- 36 Meeting export requirements

Cleaning & maintaining

(purple cards)

- 42 Personal hygiene
- 47 Cleaning and sanitising
- 50 Maintaining equipment and facilities
- 54 Checking for pests

Making food, wine & cider

(yellow cards)

- 55 Sourcing, receiving and tracing food
- 60 Sourcing and tracing grape wine
- 64 Knowing what's in your food or drink
- 67 Separating
- 70 Keeping foreign matter out of food and drink
- 73 Making wine or cider
- 77 Cooking food

Making food, wine & cider (yellow cards)

- 79 Cooking poultry, minced meat and chicken liver
- 81 Using water activity, acid or hot-smoking to control bugs
- 87 Proving the method you use to kill bugs works every time
- 89 Cooling freshly cooked food
- 91 Keeping food hot
- 93 Reheating food
- 95 Displaying food and customers serving themselves
- 97 Defrosting food
- 99 Packaging and labelling
- 105 Transporting

Troubleshooting (red cards)

- 107 When something goes wrong
- 110 Dealing with customer complaints
- 112 Recalling

Specialist (teal cards)

- 116 Making sushi with acidified rice
- 119 Making Chinese style roast duck
- 122 Making doner kebabs
- 125 Cooking using the sous vide method
- 131 Preparing red meat for mincing and serving lightly-cooked or raw

Instructions

How to use this Plan

This Plan tells you what you need to do to comply with food safety and suitability law. It tells you what your verifier/auditor will look for when they visit your business, and where you need to keep records. To help you make sure that you are following the relevant rules and are keeping the right records we have placed icons throughout this document:



The records you must keep



Something important to think about



Rules you must follow if you make food



Rules you must follow if you export



Rules you must follow if you make fruit wine or cider



Rules you must follow if you make grape wine

Throughout this Plan "food" and "drink" are mentioned. Where it says "drink" in the document, this means grape wine, fruit wine, cider, mead, wine products, other types of wine (e.g. fortified wine) and beer.

Wine includes partial processed products (e.g. fruit juice and verjuice made under a food safety plan) and extension products (e.g. vinegar, or grape or fruit based spirits).

Each topic has three sections: **Know, Do and Show.**

K

Know has general information about why this topic is important to food safety and gives ideas for how you can comply with food safety.

D

Do outlines what you must do to comply with the food safety law.

S

Show outlines what your verifier will ask you to demonstrate or the **records** they will expect to see.

Sometimes things go wrong, and your food or drink might become unsafe or unsuitable. You need to be able to identify when something has gone wrong, and be able to fix it.

You need a procedure in place and you need to keep records. These records are listed throughout the document. Follow the *'When something goes wrong'* card.

Business Details

Fill out your business details below

Business Details

Legal name

Trading name

Activity (tick as appropriate)

Winemaking

Cider making

Fruitwine or
mead making

Bottling

Storing wine

Brewing beer

Distilling spirits

Exporting

Selling
domestically

Selling food at a cafe or
restaurant

Selling food at a cellar door

On-site or off-site caterer

Retailer (*please specify*)

Serve food made by others

Postal address

Telephone

Email

Location(s)

Address site (1)
(*premises where food
business operates*)

Water supply

Additional sites

(continue on a separate sheet if needed and attach) List below any other premises that are used in connection with your business (e.g. premises used for storage or preparation of food). These activities and sites will also be covered by this Plan. You need to identify the source of the water supply.

Address site (2)	
Activities/water supply source	
Address site (3)	
Activities/water supply source	
Address site (4)	
Activities/water supply source	

Operator:

The operator is the owner or other person in control of the business. If the Plan applies to more than one food business, the operator is the person responsible for the Plan.

Name	
Physical address <i>(Business or residential)</i>	
Telephone	
Email	

Operator of each business

(if plan applies to more than one food business) Add additional rows as necessary.

Name	
Physical address <i>(Business or Residential)</i>	
Telephone	
Email	

Day-to-day manager

(write 'as above' if the day-to-day manager is the operator) The day-to-day manager is the person who has the overall responsibility to make sure that the Plan is being followed and the appropriate checks and records are completed.

Name and/or position	
Telephone	

Registration authority

Registration authority

MPI
 Council
 (Council name):

Contact person

Address

Telephone

Email

Verifier

Verification agency

Contact person

Address

Telephone

Email

Business Layout

You must make sure that the design and physical location of your business allows you to make safe and suitable food.

You need to draw a map and floor plan that includes: (as applicable)

- your building,
- the buildings surrounding it,
- the boundaries of your winery,
- where you receive grapes,
- your tank or barrel room,
- your bottling line,
- what happens in the different areas on your map, including your food preparation areas (e.g. your kitchen),
- what happens in your buildings, including non-food activities,
- what happens in the different areas of the building,
- some non-food activities being conducted in the same or neighbouring building/property that might affect food safety may need to be included in your map of your business.

Layout - Inside of your premises

This could be a hand drawn plan or photograph

A large grid for drawing a layout plan, consisting of 20 columns and 20 rows. A diagonal watermark reading "DRAFT FOR CONSULTATION" is overlaid across the grid.

Layout - Outside of your premises

This could be a hand drawn plan or photograph

A large grid for drawing a layout plan. The grid is 20 columns wide and 30 rows high. A large, light gray watermark reading "DRAFT FOR CONSULTATION" is overlaid diagonally across the center of the grid.

Managing risks near your business

Note here any activities being conducted in your winery building, or at neighbouring buildings/properties that might affect food safety or suitability in your business, and anything you do to manage risk.

Potential risk	How we manage the risk
<i>Example: Spray residue from the neighbouring property.</i>	<i>Example: Keep doors, windows, vats and tanks closed when possible.</i>

Risk to food safety	How we manage the risk

DRAFT FOR
CONSULTATION



Taking responsibility

K

Know

What do you need to know?

- You don't need to be a food safety expert but you do need to know enough to make good food safety and suitability decisions for your business. This plan is intended to help you to do that.
- It is your responsibility to make sure the food and drink your business produces, handles and/or sells is safe and suitable.
- Overall, you as the owner are responsible, even if you employ people to help manage food safety and suitability.
- You need to know who is responsible for completing key jobs in your business.
- If you contract out part of the processing of your food, wine or cider, you need to make sure that everyone involved knows who is responsible for the safety and suitability of your product at each stage, and that your product can be traced. For example, if you send your wine off-site for bottling the bottler needs to operate under a food safety plan (e.g. this template). It's then the bottler's responsibility to keep records about any adjustments or additions, and maintain traceability. If the bottler applies a label that you have provided, you're responsible for making sure what's on the label is accurate and true.



Not all the sections in this guide may be applicable to your business – you don't have to follow rules that don't apply to you (for example if you don't cook food you don't need to follow the rules about cooking food). If you are unsure about whether a section applies to your business seek advice from a consultant, your verifier or your registration authority (local council or MPI).

K

Know

Food safety vs. food suitability

- **Food safety** is about preventing food from causing illness or harm. Food can be unsafe if it contains certain ‘hazards’. Hazards fall into 3 categories:
 - 1 **Biological (bugs):** Certain bugs can make people sick if in or on food or drink.
 - 2 **Chemical:** Many chemicals can make people sick if in or on food or drink.
 - 3 **Physical (foreign):** Glass, metal or other sharp objects can sometimes get into food or drink and cause harm.
- Food suitability is about making sure food meets customer expectations and doesn't contain anything unexpected or offensive.
- Taking responsibility for food safety means understanding the possible hazards that could make your food unsafe and taking steps to:
 - keep bugs, harmful chemicals and foreign matter out,
 - reduce bugs to safe levels,
 - eliminate or remove bugs.
- Taking responsibility for food suitability means:
 - only using foods or ingredients that are fit for purpose,
 - labelling food and drink correctly,
 - making sure any claims about your food or drink are true.



Know

Keeping customers safe

- Following the rules will help your business as:
 - about 86% of people that get sick from food don't report it – but they still look for someone to blame,
 - about 75% of people don't think that they got sick from food they made themselves, and blame someone that sold food to them,
 - most people believe it was one of the foods they last ate that made them sick – when it actually could have been something they ate days or weeks ago,
 - about 40% of people that get sick will not buy the food they blame for making them sick again (and might tell their friends not to buy it),
 - if someone reports illness, a food safety or wine officer investigates their complaint – this means you might be visited even when you didn't have anything to do with making someone sick.

Keeping records

- Keeping good records will help you prove that your food or wine didn't make people sick, and that your wine is what you say it is.
- There are some records you need to keep, others you might like to keep for good practice. Where you aren't required to keep records it is your choice whether you wish to keep records or other evidence to keep track of how well you are managing food safety and suitability.

**Know**

- Without records it will be harder to prove your food is safe and suitable which could lead to:
 - recalling food,
 - stopping sale of food,
 - having to make certain improvements to your processes or practices,
 - fines or prosecution.
- All of the above can cost your business in time, money or reputation.
- There is more helpful guidance and tools available on the MPI website (www.mpi.govt.nz).

Advice and guidance

- You can get advice and guidance from others, for example consultants, verifiers, New Zealand Wine Growers or the Fruit Wine and Cider Makers Association of New Zealand.
 - **Consultants** can design systems, processes and procedures for you – but can't take away your responsibilities. It is part of their job to help you understand how to make good decisions about food safety and suitability – especially when things don't go to plan.
 - **Verifiers** can provide advice and coaching (options and examples) about how you can make sure your business is making safe and suitable food but they cannot make your decisions for you.

D

Do

What do you need to do?

- Assign someone who is responsible for making sure the plan is followed: (tick as appropriate)

day-to-day manager, or

delegated person immediately.

Name: _____

- Always follow your plan.
- Any contractors or processors that your use must have the appropriate registered plan to ensure that any food or drink they handle remains safe and suitable.
- Make sure you have enough trained and competent staff (and supervisors if necessary) to achieve the safety and suitability of food.
- Get verified. You must give your verifier the access to facilities and records they need to perform their duties.



- Keep a copy of all documents or **records** required for at least 4 years.
- Keep a copy of all documents or **records** required for at least 7 years.
- All **records** must:
 - be accurate,
 - easy to read,
 - identify what was done,
 - when it was done,
 - who did it.



- Make sure **records** are easily accessible and can be provided within 2 days when requested.
- If you're making wine, you must notify MPI within 30 days of changing the day-to-day manager of your plan.
- If you're no longer using your plan or it no longer covers what you do, you must tell MPI and your verifier within 30 days.

S

Show

What do you need to show?

- Your verifier might ask:
 - whether you have given certain food safety responsibilities to other people (including contract processors) and, if so, how you know they are doing a good job of keeping food safe and suitable,
 - whether there have been any changes to what you do, make or sell since the last time they were there,
 - to see your records.



Places and equipment

K**Know**

What do you need to know?

- When choosing places and equipment for your business there are some things you should consider, such as:
 - what the place has been previously used for,
 - that rooms and equipment can be easily cleaned and maintained,
 - that there is adequate lighting, ventilation and services (e.g. water and electricity),
 - that equipment is designed for food use and for the process you are intending to use it for.

Why is choosing good places and equipment important?

- Places and equipment are the foundation of your business, and the choices you make determine how hard you and your staff will have to work to know food is always safe and suitable.

K**Know**

- It's often things which are easily overlooked that can result in food being contaminated and people getting sick. For example:
 - a light or bottle breaking and spreading glass into food or drink,
 - grapes absorbing heavy metals or chemicals in soil from a previous land use (e.g. chemical stores, timber processor etc.) into their root systems and leaves,
 - dust, dirt or chemicals carrying bugs getting into food from neighbouring properties,
 - buildings constructed from materials that could be a source of bugs, chemicals or foreign matter getting into your food or drink.
- It's best to source equipment especially designed for food use and for the process you are intending to use it for.
- It's best to choose places and equipment that prevent as many food safety risks as possible.

D**Do**

What do you need to do?

- Manage and food safety/suitability risks associated with places and equipment.
- Check previous use of land and buildings, and don't use areas that are likely to make food unsafe.
- If your neighbours do things that could cause food to be unsafe or unsuitable, work out how to minimise the chance that this could happen.
- Make sure any buildings used for your food business have enough space to accommodate the number of staff you plan to have working there, and allow for a good workflow.

D**Do**

- Design your workflow so you can safely move around your area (e.g. so you don't carry raw chicken across areas used for serving ready-to-eat food).
- Buildings, fittings, fixtures or equipment must be made of materials that won't be a source of bugs, chemicals or foreign matter getting into your food, or work out how to minimise or eliminate the chance that food could become contaminated from these sources.
- Ensure all areas where food will be handled or stored can be easily cleaned.
- Limit the amount of dust dirt, fumes or pests that can get into buildings used for handling, processing or storing food and drink.
- Provide places for storage of cleaning chemicals and maintenance compounds away from food and drink.
- Make sure there are toilets and places to wash hands close to food handling areas (including where grapes or other fruit are being harvested).
- Provide for rubbish areas away from food and drink processing/preparation areas
- Make sure you have equipment for measuring control points (e.g. thermometers for checking fridge/chiller temperatures or hydrometers for checking sugar levels in wine) and that it is accurate and working properly.
- Food in vending machines must be kept safe.

S

Show

What do you need to show?

- Your verifier might ask:
 - how you know the location hasn't previously been used for something that will make food unsafe,
 - what you do to manage risks from activities of your neighbours,
 - why you chose the equipment you are using,
 - how you know the building, fixtures, fittings and equipment aren't a risk to the safety or suitability of your food.
- Your verifier will observe workflow and whether staff can easily work and maintain good personal hygiene.

DRAFT FOR
CONSULTATION



Checking the plan is working well

K

Know

What do you need to know?

- It is your responsibility to regularly check that food safety and suitability is being well managed in your business.
- What to check and how often, depends on the effect of something going wrong in your business. You should check the most important things (e.g. thermometers and tanks) most often.
- An audit by a company you supply also counts as an internal check, but you must still conduct regular checks yourself.
- You should check:
 - that people are doing what they need to,
 - the procedures you have put in place are being followed and are effective,
 - your facilities and equipment remain suitable for the food activities at your business.
- You or one of your staff must be your own internal verifier (self-auditor).



Know

Why is self-auditing important?

- You are responsible for your business and the food you produce. If you wait for someone else to tell you that something has gone wrong, it may become costly and your food may make people sick.
- Check the plan is working well by (for example):
 - checking whether staff are carrying out key food safety behaviours (e.g. washing hands etc.),
 - checking records are being completed and kept,
 - looking through records to check that things are working as expected,
 - reviewing **'When something goes wrong'** information and checking that steps have been taken to prevent problems from happening again,
 - running food safety quizzes with staff,
 - using the **'Show'** sections in this template to ask the same questions or check the same things that your verifier would ask or look at.
 - testing the environment or foods for certain bugs or chemicals to show procedures (e.g. cleaning and sanitising) are effective.

K

Know

Some notes about testing:

- There are specific requirements for testing in some situations (e.g. self-supply water, or testing to ensure wine is free from obvious fault and meets export requirements). There are also rules about certain limits for bugs or chemicals in the Australia New Zealand Food Standards Code <http://www.foodstandards.govt.nz/code/Pages/default.aspx>. A limit doesn't mean you always have to test the food for that bug or chemical. If you are thinking about using sampling and testing to show your plan is working well, this shouldn't be the only check that you do. It is not possible to test your way to food safety.
- Testing can be a useful tool, but it has limitations. If, for example, testing results find harmful bugs, that might mean some part of the process is not working well.
- A negative result may not prove that your plan is working perfectly (or that the food is safe). Bugs, in particular, are not usually evenly distributed in food. It's possible to test some food and get a negative result, when another part of the food in the same batch has high levels of harmful bugs.



Imagine you have a batch of 200 apples packed into 10 sacks and you think it's possible that there might be 1 or 2 bad apples in the batch. You open 1 sack and pull out 1 apple. If it's a good apple does it prove all the other apples are good?

How many sacks do you have to open, and how many apples do you have to pull out (sample) to be sure that you either find the bad apples or prove that the batch contains no bad apples? What if, once an apple has been taken out of the sack, you aren't allowed to sell it?

Would you 'test' to find the bad apples in the sacks – or put processes in place to make sure you found and removed any bad apples before you packed them in the sacks in the first place?

K

Know

- If you want to include testing as one of your checks, it is often more effective to test the environment rather than final foods or drinks.
- If you use sampling and testing as part of your procedure for checking, it is highly recommended that the testing plan is developed by an expert. If you don't have an expert in your business, a consultant, your verifier or MPI can provide information about putting together a sampling and testing plan.

D

Do

What do you need to do?

- You must set up procedures for regularly checking that you and your staff are making safe and suitable food and meeting your requirements and responsibilities under the and the *Food Act 2014 and Wine Act 2003*.
- Follow the procedure on **'When something goes wrong'** if your self-checks identify mistakes or actions that could have made food unsafe or unsuitable.

S

Show

What do you need to show?

- Show your verifier:
 - how you check that your procedures are working well,
 - results of the checks you have made.



Training and competency

K

Know

What do you need to know?

- You and your staff have different training needs. You must know what training staff and visitors need, to produce safe and suitable food and drinks.
- Not all staff and visitors need training in all things but they must know how to keep food and drink safe and suitable when doing their particular job.
- If you have staff you will need to train them:
 - before you start making and selling food and drink,
 - before you introduce or change a procedure, or staff,
 - whenever you think you or your staff need it.
- All staff and visitors must understand the training they are given.
- All staff must be confident that they know exactly what to do and follow the plan to make sure safe and suitable food is produced.
- If you're a one person business you can use online tools, food safety courses, or seek help from a consultant.

D

Do

What do you need to do?

- The day-to-day manager or delegated person (Name: _____) (tick as appropriate) must make sure that all staff and visitors are trained so they know how to meet the rules about:
 - cleaning hands,

D

Do

- wearing clean clothing,
- reporting sickness,
- dealing with foods or drinks that could make people sick,
- cleaning and sanitising,
- keeping foods separate in the food preparation area (including, managing allergens and managing chemicals and poisons),
- other procedures which are specific to your business,
- what to do when something goes wrong.
- Train staff:
 - before they start working in your business,
 - when a procedure is introduced or changed.
- Keep a **record** of training that you, your staff or visitors have completed, and when they completed it.
- All visitors (e.g. delivery people, contractors etc.) must keep food safe while they are in your food business.

S

Show



What do you need to show?

- Show your verifier:
 - a **record** of how and when staff were trained to follow the plan. Include:
 - who was trained,
 - when,
 - what parts of the plan you covered,
 - signatures from the trainer and trainee.



Suitable water

K

Know

What do you need to know?

- Suitable water must be:
 - safe to drink if it is used for food and drink preparation, washing food contact surfaces/ equipment, and for staff to wash their hands,
 - clean and fit for purpose when used for any other activities in growing or making food.

Why is it important to ensure water is suitable?

- Water can carry harmful bugs and chemicals that can make people sick. These might be because the water is contaminated at the source, or because water pipes and storage containers become contaminated.
- It's important to consider how you use water in your business, and make sure that the water is not going to be a source of food contamination. If you use a council or registered water supply most of this is done for you.

If you use self-supply water

- You will need to prove it is suitable for use by having it tested at an accredited and recognised lab (there is information on the MPI website about these).
- You will need to know where near-by activities and naturally occurring chemicals could make your water supply unsafe.

K**Know**

- Keep water tanks:
 - clean and in good condition to stop the build-up of sediment, and
 - covered to stop animals, birds and dirt from contaminating water.
- You may need to install operate and maintain (e.g. replacing filters) a water treatment system, following the manufactures instructions, to ensure water is suitable for use with food and drink.
- You might need to treat roof, surface or ground water using filtration, chlorination or UV disinfection to make it suitable for use.
- Self-supply water sources may be subject to other legislation as well.

For ground water supply only

- Bores should be designed and maintained so they are protected from surface contamination.

For roof water supply only

- Additional risks to contamination of your water can be reduced by:
 - collecting water only from clean roofs and gutters made from safe materials (e.g. no lead based paints, bitumen, exposed timber or copper gutters),
 - putting screening gutters up, removing overhanging branches and vegetation, and mounting aerials and satellite dishes away from water collection areas,
 - installing a first flush device (a device which diverts the first flush of water when it rains).

D

Do

What do you need to do?

- Select where you get your water from: (tick as appropriate)
registered supplier: (name of supplier)

roof water supply

surface or insecure ground water supply

secure ground water supply (a supply that meets the definition of secure is in the 'Drinking Water Standards for New Zealand')*

a supply which is currently subject to a Public Health Risk Management Programme*

*You don't need to do anything more if you choose to use one of these programmes.

- For water for making food, hand washing and cleaning, either:
 - use a potable (council/registered) water supply, or,
 - check that your roof, surface or ground water supply is tested at least once every year in an accredited lab and meets the following limits:

Measurement	Criteria
<i>Escherichia coli</i>	Less than 1 in any 100 ml sample*
Turbidity	Must not exceed 5 Nephelometric Turbidity Units
Chlorine (when chlorinated)	Not less than 0.2mg/l (ppm) free available chlorine with a minimum of 20 minute contact time
pH (when chlorinated)	6.5 – 8.0

**Escherichia coli* testing must be performed by an accredited and recognised lab.

- Test any new supply of water before using it in food areas.



- Test roof, surface or ground water supplies within 1 week of knowing about a change to the environment or of activities that may affect the safety and suitability of the water.



- Test roof, surface or ground water supplies within 1 month of knowing about a change to the environment or of activities that may affect the safety and suitability of the water.

- For surface and (insecure) ground water intakes must be:
 - at least 10m away from livestock,
 - at least 50m away from potential sources of contamination including silage stacks, offal pits, human and animal waste, potential chemical stores and tanks

All water supplies

- Only use water tanks, containers, pipes, outlet taps and treatment systems for any water supplies on site that are suitable for drinking water (or are 'food-grade'). Regularly check and maintain these.
- Clearly mark outlet taps, tanks, and pipes that do not contain clean water. These must not be used for food processing, hand washing and cleaning.
- You must have a system for managing cross contamination, dead ends and backflow.
- If your water supply becomes unsafe (or you're advised by your supplier it is unsafe):
 - don't use it, or
 - for chemical or physical contamination seek advice from your verifier or a water expert, or

D

Do

- for contamination with bugs:
 - boil it for at least 1 minute before use, or
 - disinfect it with chlorine before use, or
 - use another supply of water which you are sure is safe (e.g. bottled water).
- Always throw out any food which has been contaminated by unclean/unsuitable water.
- You must **record** the water source for each of the locations you operate in.

S

Show



What do you need to show?

- Your verifier will:
 - ask how you know your water is fit for purpose,
 - ask you about how you check and maintain water equipment and facilities,
 - ask to see your **records** of water sources for each of your locations,
 - how you manage contamination or cross contamination of water supply.

For self-supply water

- Your verifier will:
 - ask to see a **record** of test results for any roof, surface or ground water supplies that are used for cleaning equipment, or for hand washing,
 - ask what near-by activities could affect the safety of your water,
 - ask you to show them how you know any water treatment system is working properly.



Meeting export requirements

K

Know

What do you need to know?

All exporters:

- You need to be aware of your duties as an exporter.
- You need to need to notify MPI (Wine.Query@mpi.govt.nz) within 24 hours if your product:
 - is declined entry into a market,
 - is not fit, or is no longer fit for its intended purpose,
 - doesn't meet, or no longer meets any OMARs,
 - doesn't have, or no longer has the required official assurances (e.g. if you have loaded the wrong wine into a container).
- Some importing countries set rules that are different from NZ rules. These rules are outlined in Overseas Market Access Requirements (OMARs).
 - There are currently only OMARs for exporting grape wine. MPI may negotiate OMARs for other products at anytime. You need to keep up-to-date with changes to the requirements. You can do this by subscribing to updates on the MPI website (www.mpi.govt.nz).
- All wine labels need to meet either the NZ labelling rules, or the importing country labelling rules if these conflict.
- There are 2 different pathways to export wine.
 - To export grape wine you need to follow [Pathway A](#).



Know

- To export other wine (e.g. fruit wine, cider, mead, wine products or wine made from grapes not exclusively grown in NZ) you need to follow [Pathway B](#).
- If you need any additional help finding or understanding the export rules that apply to you, contact MPI at exporterhelp@mpi.govt.nz

Pathway A

To export grape wine you need to:

- 1 get export eligibility approval by:
 - ensuring all grape wine for export including wine that you have purchased for blending, bottling, or further processing, is made and packaged following a registered food safety plan (e.g. following this template) that has been verified in the last 12 months,
 - having each homogeneous batch of wine tested by an independent panel to ensure it's free from obvious fault (taints and odours).
- 2 apply for an export eligibility statement. This is a statement you can get for each consignment of wine that confirms that the wine you're exporting has been approved as eligible for export. You won't be able to export your wine without an export eligibility statement, so make sure you always get one.
- 3 get an export eligibility certificate (if required by your destination market).

**Know**

- There is guidance available on the MPI website to help you get your label right. See: <http://www.mpi.govt.nz/dmsdocument/870-guide-to-meet-grape-wine-labelling-requirements>
- NZ Winegrowers publishes an International Winemaking Practices guide that outlines acceptable winemaking practices for most major export markets. This is available through the members only section of their website www.nzwine.com
- Some markets require chemical testing to be carried out on each batch of wine. There's a list of recognised and accredited labs on the MPI website, here: www.foodsafety.govt.nz/registers-lists/recognised-laboratories/
- You or your staff will need to register to use Wine E-Cert so you can:
 - apply for export eligibility approval of your batches of wine,
 - apply for export documentation for your consignments,
 - monitor the status of your applications.
- All wine E-Cert users need to have their own login and be current staff.
- To register for Wine E-Cert you will need to:
 - create a RealMe account,
 - apply to use Wine E-Cert.

K**Know****Pathway B**

To export other wine you need to:

- 1 register with MPI as an exporter (see <https://www.mpi.govt.nz/exporting/food/fruit-wine-cider-and-mead/>)
- 2 make your wine under a registered food safety plan and get verified every 12 months,
- 3 get a Free Sale Certificate if your destination market requires it. A Free Sale Certificate confirms that your product meets NZ standards. You will need to get a manufacturer's declaration so you can get a Free Sales Certificate. There's more information about applying for a Free Sales Certificate on the MPI website: www.mpi.govt.nz/exporting/overview/export-certification/free-sale-certificates-and-free-sale-statements/

D**Do****What do you need to do?**

If you are following Pathway A you must:

- only export wine that has been made under a registered food safety plan (e.g. this template) that has been verified in the last 12 months,
- ensure that the wine you export meets the current OMAR for that market. You must be able to find and use the most up-to-date OMAR,
- if you buy and export NZ wine made by someone else, you must get a declaration from them confirming it is eligible for the market you want to export it to. They must do this through wine E-Cert,

D**Do**

- if you make wine for someone else you must provide them with confirmation of export eligibility. You must do this through wine E-Cert,
- collect and submit representative samples for each batch of wine you want to export. You need samples for:
 - sensory testing to determine that are free from obvious fault (any export market),
 - any required chemical analysis at a recognised wine testing lab (if exporting to the European Union or Brazil).
- If you become aware of a problem with an export consignment you must follow the *'When something goes wrong'* card and inform MPI within 24 hours.

If you are following Pathway B you must:

- only export wine that has been made under a registered food safety plan (e.g. this template) that has been verified in the last 12 months,
- register with MPI as an exporter, obtain the necessary documents required for export (e.g. free sales certificate or free sales statement).
- If you become aware of a problem with an export consignment you must follow the *'When something goes wrong'* card and inform MPI within 24 hours.

S

Show

What do you need to show?

- Show or explain to your verifier:
 - how you know you're using the most up-to-date OMARs,
 - record of countries you export to,
 - how you are meeting any relevant importing market requirements if they are different from the NZ requirement,
 - how you ensure samples are representative of a homogeneous batch,
 - how you follow the *'When something goes wrong'* card and let MPI know of any problems with export consignments.

DRAFT FOR
CONSULTATION



Personal hygiene

K

Know



What do you need to know?

- Ways to protect food from contamination from people include:
 - washing hands,
 - not working with food or drinks when sick with a contagious cough that prevents normal breathing function or anything that causes vomiting, diarrhoea or jaundice,
 - wearing clean clothes (e.g. aprons, overalls, boots, hats and hairnets).
- Washing your hands helps to keep bugs out of the food and drink preparation area. Regular hand washing helps prevent contamination of your food or drink.
- One of the most common ways bugs get into food or drink is from people – mostly from their hands.
- Regularly washing hands in soapy water for 20 seconds, rinsing and then drying them properly (using paper towels, single use cloths, or an air dryer) is one of the best and easiest ways to help prevent bugs getting into your food or drink.
- Uncovered cuts, sores and boils can spread bugs and make food unsafe and unsuitable, especially if they are weeping or infected.



If people are wearing gloves (whether to cover sores or for any other reason), they should wash their gloved hands or replace the gloves in all the same situations when ungloved hands should be washed.

K**Know**

- Personal hygiene is important even if your workplace is located on the road or in the middle of a field.
- You and your staff should seek medical advice if you/they:
 - have jaundice, or
 - have vomited or had diarrhoea 2 or more times in a day, or
 - have been sick with a tummy bug for more than 24 hours.
- Harmful bugs can be transferred to food through a sick person's faeces, vomit and other body fluids (e.g. blood and snot).
- Staff who have had a tummy bug should not work with food until 48 hours after they feel better.
- Dirty clothing can contaminate food, surfaces and equipment.
- Wearing clean clothes (overalls or aprons etc.) helps to keep bugs out of food.
- If staff contaminate food, you may have to recall it. See **'Recalling your food or drink'**.

D**Do****What do you need to do?**

- Wash your hands in soapy water for 20 seconds then dry thoroughly using paper towels, single use cloths, or an air dryer.
- Always have soap and paper towels, single-use cloths or an air dryer by the handwashing sink.
- You must keep your hand-washing area clean.

D

Do

- You must wash your hands:
 - when entering the food and drink preparation areas,
 - before handling food and inputs,
 - after coughing or sneezing,
 - after using the toilet,
 - after using your phone,
 - after taking out rubbish,
 - after touching something you think is dirty.
- You must manage any cuts or sores by: (tick as appropriate)
 - covering any cuts, sores, or boils,
 - not handling food if cuts, sores, or boils are weeping or infected and can't be totally covered.

Manage sick staff

- Implement a sickness policy to ensure you or your staff don't work with food or drink when you/they are sick with an illness that can be passed on through food or drink.
- Any staff or visitors (including contractors and pickers) who have had a **contagious cough that prevents normal breathing function**, vomited, had diarrhoea or jaundice in the 48 hours before entering your business, or who develop these symptoms when on your premises, must tell either the: (tick as appropriate)
 - day-to-day manager, or
 - delegated person immediately.



Name: _____

D

Do

- Staff must stay away from the food or drink making area until they are well if they have an illness they can pass on through food or drink.
- Sick staff may be able to complete tasks that do not come into direct contact with food, drink or making areas.

Wear clean clothing

- Clean clothing (e.g. aprons, overalls, boots, hats and hairnets etc.) must be worn before handling food or entering food preparation areas (this applies to contractors and visitors too).
- You must make sure of one of the following, either: (tick as appropriate)
 - staff wear their own clean clothing, or
 - I provide clean clothing for staff.
- Remove outer protective clothing (e.g. aprons etc.) before leaving the food or drink making area (e.g. to go to the toilet, outside etc.)

S

Show

What do you need to show?

- Your verifier will:
 - check everything they need is there by washing their hands when they enter your business.
- Your verifier will ask:
 - who is responsible for making sure your hand washing area is fully stocked and cleaned,
 - how you know people are washing their hands when they should,

S

Show



- staff about when they wash their hands, and may ask them to show how they wash their hands,
 - what happens if someone has a tummy bug or gets sick,
 - check that everyone who handles food puts on clean clothing/aprons at the start of (or as required, during) each shift,
 - ask how you make sure clean clothing is worn,
 - ask you questions about your rules around clean clothing or any issues you have had with your rules.
- Show your verifier:
 - a written **record** of when staff were sick.

DRAFT FOR
CONSULTATION



Cleaning and sanitising

K

Know

What do you need to know?

- Cleaning and sanitising are 2 different things:
 - cleaning removes dirt, grease and most bugs from surfaces,
 - sanitising kills harmful bugs left on clean surfaces.
- Food contact surfaces and equipment should be cleaned every day that food touches it (it's best to clean as you go). If food contact areas are not used for a few days or from season to season, they should be cleaned before they are used again (to remove dust and dirt that has settled there in between use).
- It's important to clean staff-rooms, bathrooms and toilets. This minimises the chance of staff bringing bugs from these areas into places where food is handled or processed.
- It is a good idea to keep storage rooms clean and tidy.
- Your cleaning equipment (brooms, mops, cleaning cloths), can become a source of contamination if they aren't cleaned or replaced regularly too.
- Using disposable cleaning cloths or washing cleaning cloths after each day's use is recommended.
- It's important to check that pumps, hoses and couplings are cleaned and sanitised before use so they don't contaminate your product.
- If you are using automated "clean-in-place" (CIP) systems, you should have an expert install the system and confirm it is working properly.

D**Do****What do you need to do?**

- Sweep, vacuum or mop floors, wipe benches and clean food contact surfaces, equipment, staff facilities and storage areas regularly and when needed.
- Always use clean hot soapy water or food-safe cleaning chemicals according to the label instructions.
- Clean brooms, mops and other cleaning equipment regularly.
- Store cleaning equipment and chemicals away from food.
- Use sanitising chemicals designed for use in food areas and follow the instructions on the label.
- Always sanitise food contact surfaces and equipment after cleaning, or before use, as required.
- Sort and/or wash dirty laundry (if you choose to supply your staff with clean clothing) away from food.
- Store rubbish away from food and remove it from the premises regularly.
- Make sure people can't mistake rubbish for food/ingredients.
- Clean bins and rubbish areas regularly.

S

Show



What do you need to show?

- Your verifier will:
 - look around your business and check that everything looks clean and tidy. They will also ask you and/or your staff when and how you clean and sanitise.
- Show your verifier:
 - your 'end-of-day' routines including stock control,
 - a **record** of your cleaning tasks, who does it, and when,
 - how you remove waste,
 - how you clean your bins and rubbish area, and who is responsible,
 - that your premises and equipment are clean and that laundry is being done when necessary,
 - how you clean and sanitise your food and drink making areas and equipment,
 - how you use chemicals safely.



Maintaining equipment and facilities

K**Know**

What do you need to know?

- If your premises and equipment aren't designed for food use, aren't in good condition and/or don't work properly, you may make unsafe and/or unsuitable food and drink.
- It is important to assess where you make food and drink and make sure it's not made of materials that could contaminate it, can be easily cleaned, has the necessary services (e.g. power and water) and is big enough for all activities (and staff) you have. You need to regularly check that all of this remains true (is maintained) for your business.
- Broken equipment and an unkempt building (e.g. damaged floors or walls) can allow pests and bugs in your food and drink. This can lead to unsafe and unsuitable food and drinks.
- You don't need to be an expert at fixing or maintaining your equipment, but you do need to be able to identify if there's a problem and how to fix it, or who to bring in to fix it.
- The water you use for making food and drink, hand washing and cleaning must always be clean. You need to know if your water pipes, tanks and water treatment systems fail, so they can be fixed.

D**Do****What do you need to do?**

- Check your premises and equipment for signs of deterioration (e.g. holes in floors and walls) and fix as necessary.
- Check your equipment for signs of deterioration and fix as necessary.
- Service your equipment regularly.
- Calibrate your equipment (e.g. pH meter, thermometer etc.) as required.
- Maintenance compounds and chemicals must:
 - be fully labelled, stored, sealed and used following the manufacturer's instructions,
 - be stored and transported in containers that are clearly different from food containers, including containers used for additives and processing aids, and are appropriate for the compound they contain.

For all water supplies

- Water pipes must work properly to stop animals, birds, dirt and waste from contaminating your water.
- Always flush water pipes after:
 - repairs and maintenance,
 - after 7 days without use to remove stagnant water.
- Keep water tanks:
 - Clean and in good condition to stop the build-up of sediment, and
 - Covered to stop animals, birds and dirt from contaminating water.

D**Do****For surface or ground water supply only**

- You must install, operate and maintain the water treatment system following the manufacturer's instructions.
- You must follow the manufacturer's instructions for replacing and cleaning filters.
- Bores must be designed and maintained so they are protected from surface contamination.

For roof water supply only

- Water must only be collected from clean roofs and gutters made from safe materials (e.g. no lead based paints, bitumen, exposed timber or copper gutters).
- You must reduce the risk of contamination as much as possible. This includes:
 - putting screening gutters up,
 - removing overhanging branches and vegetation,
 - mounting aerials and satellite dishes away from water collection areas,
 - installing a first flush device (a device which diverts the first flush of water when it rains).
- You must install, operate and maintain the water treatment system (e.g. replacing filters) following the manufacturer's instructions.

S

Show

**What do you need to show?**

- Show your verifier:
 - what you do to check your premises and equipment are designed for food and drink use and are in good working order,
 - how often you do maintenance checks,
 - what you check for during maintenance checks,
 - a **record** of your regular maintenance tasks or repairs, who does them and when,
 - how often you've inspected and maintained your water system and tanks. Also **record** who did it and when.
- Your verifier will check that you are calibrating your equipment (e.g. pH meter, thermometer etc.) as required.

For self-supplied water only (surface, ground or roof supply)

- Show how often you've inspected and maintained (e.g. changed filters) your water treatment system.



Checking for pests

K

Know

What do you need to know?

- Pests such as mice, birds and insects can spread disease. They do this by picking up bugs from dirty items such as waste and transferring them to food and food equipment.

D

Do

What do you need to do?

- Check for and remove any signs of pests daily (e.g. droppings, empty full traps, dead insects).
- Clean and sanitise any affected equipment and areas that come into contact with food.
- Follow the procedure on what to do **'When something goes wrong'** if you find signs that a pest may be present in your food business.

S

Show

What do you need to show?

- Show your verifier how you check for pests.



Sourcing, receiving and tracing food

K

Know



What do you need to know?

- You need to know that all of the inputs, ingredients, additives and processing aids that are used in your wine or cider are safe. You also need to know where they came from.
- If you buy in fruit, juice or bulk wine you need to get information about where it's come from and what has been added to it from your supplier.
- If exporting wine, you need to know where all of your wine has come from (including top-ups) so that you can be sure it's eligible for an intended market.
- You should use trusted suppliers (e.g. registered food businesses) for your food, ingredients and processing aids to give you a good start to making safe and suitable food and drink.
- You need to check that the fruit, juice, must and other ingredients you receive are:
 - safe to use,
 - not damaged,
 - at the right temperature (if applicable),
 - not past their Use-By date.

K

Know

- You need a system to keep track of the food, ingredients and inputs you receive.
- You need to be able to trace and recall your product immediately if you need to. You can use either option 1 or 2 for tracing food. If you make wine or cider you need to use option 1 to trace your products.
 - 1 **record** all information (including suppliers' information with batch/lot identification) so that your product can be traced and recalled (if necessary), or
 - 2 only **record** the minimum amount of information required and recall all food you have made that might be affected if there is a problem.
- There is specific information you must keep about foods, ingredients or inputs you import.

Why is sourcing, receiving and tracing important?

- Using trusted suppliers gives you confidence that foods, ingredients and inputs are safe to use. This can save you time and money, and prevent people getting sick from your food or drink.
- Some foods must be kept cold (chilled or frozen) to stop bugs growing as they can become unsafe quite quickly if they're not kept at the right temperature.



It's best to be there to receive deliveries. If chilled or frozen food is delivered out of hours, how will you know that it was delivered at the right temperature, and if it's still safe to use?

D

Do

What do you need to do?**Source**

- Keep a list of your suppliers and their contact details.
- If you are an importer of food, the requirements you must meet are outlined here: <https://www.mpi.govt.nz/importing/overview/food-imports/>
- If you get your fruit, juice or must from a supplier you must get a statement from them to show your inputs are safe and suitable to be made into wine or cider.
- If exporting wine you must keep traceability records to show that your wine is eligible for its intended market.
- You must always check:
 - the temperature of foods that need to be chilled to keep them safe, and if it is above 5°C, apply the 2 hour/4 hour rule,
 - packaging is not damaged or dirty,
 - food is not past its Use-By date.
- When receiving grapes, fruit, juice, must or other ingredients, start your tracing system by:
 - keeping your receipts, or
 - writing down the type(s) and quantity of food(s), ingredients or inputs (e.g. weights or volumes) that you got from each supplier, or
 - using an electronic (e.g. bar-coding) system to track what you received, when and who from.

D

Do



Trace

- For all food choose either: (tick as appropriate)
 - option 1 – **record** all information to enable targeted recall, or
 - option 2 – **record** minimum information and recall all food that might be affected.

You must choose option 1 if you are making wine or cider.

- If you choose option 1:
 - you must have a written plan to be able to trace your food, ingredients and/or inputs, and recall it if there's a food safety problem with either your product and/or any of the ingredients in your product, and
 - you must keep records including supplier details, brand and batch ID's, Best Before and Use By dates,
 - your staff must know how to follow the plan (i.e. recording the information above), and where to look for this information on pre-packaged products.
- If you choose option 2:
 - you must record the following information:
 - the name and contact details of your supplier,
 - the type and quantity of food or ingredients,
 - the temperature of the food (if it needs to be kept at a certain temperature to keep it safe and suitable), and
 - recall or dispose of all food, ingredients or inputs which may have been affected.
- You must test your tracing systems regularly to prove you can quickly identify and prevent the safe or distribution of, or recall, unsafe/unsuitable food.

S

Show

**What do you need to show?**

- Your verifier will ask you who your suppliers are and how you check that they are trusted suppliers.
- Your verifier might:
 - watch what you do when receiving a delivery of food, ingredients or inputs at your business,
 - check your **records** relating to receiving food, ingredients or inputs,
 - ask how you have tested your tracing system. They might also conduct a tracing test using an ingredient you have received or a batch of food or drink you have produced.
- Show your verifier a **record** of:
 - all of the information outlined in the **Do** section if you are importing food,
 - all of the information in the **Do** section if you chose option 1, or
 - the minimum information required listed in the **Do** section if you chose option 2.



Sourcing and tracing grape wine

K

Know

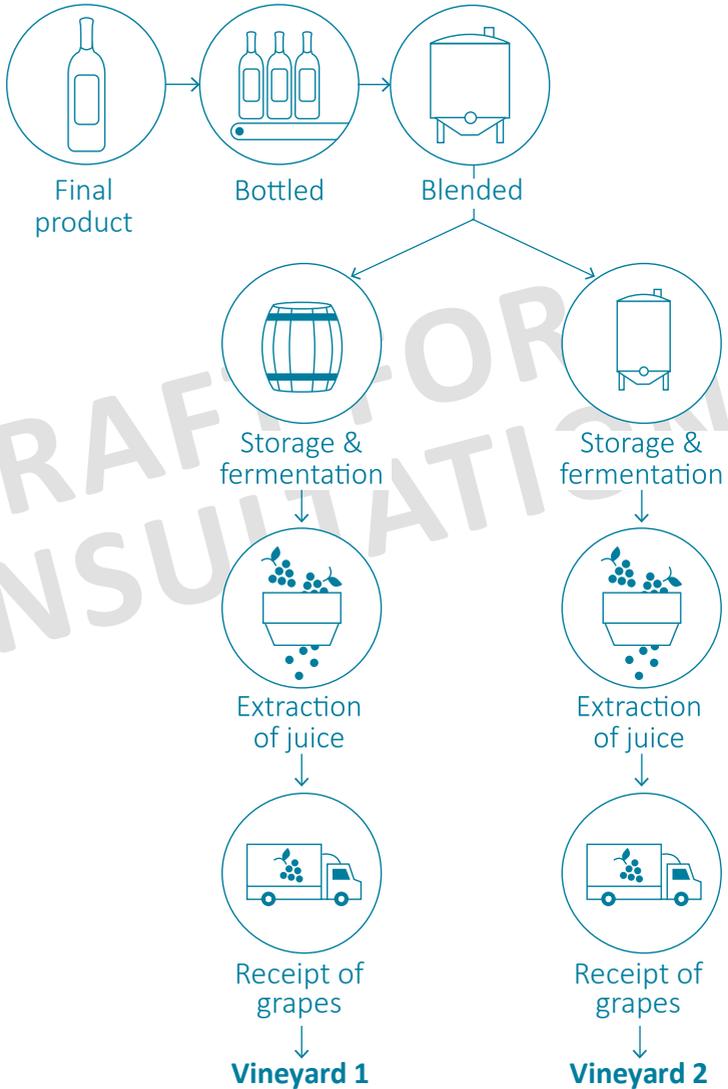
What do you need to know?

- In addition to the tracing rules in the *'Sourcing, receiving and tracing food and drink'* card, you have extra tracing rules to meet.
- All grapes you receive for making grape wine need to be safe. You need to either:
 - keep a copy of your, or your suppliers, spray diary, or
 - have a statement from your supplier which shows your grapes are safe.
- You need to:
 - know where your grapes have come from,
 - be able to trace your wine at all stages of production. This includes tracing back to the vineyard where the grapes were grown (if you receive bulk New Zealand wine or juice your supplier needs to provide this information) and any wine in bottles, bladders or barrels,
 - make sure statements about variety, vintage area and country of origin are true, and that you can prove them.



Know

- You need to be able to trace your grape wine from bottle to vineyard:



K**Know**

- You need to know who any wine you've made has been sold to, unless it has been sold direct to the consumer. This is so you can recall it if there is a problem.

D**Do**

What do you need to do?

- You must keep a record of all of the following for every batch of wine you make:
 - spray diaries or statements showing that the inputs, ingredients, additives and processing aids are safe to use,
 - where your inputs, ingredients, additives and processing aids came from. You must have enough information to be able to prove which vineyard(s) any grapes, juice or must came from,
 - the amount used.
- You must choose option 1 from the **'Sourcing, receiving and tracing food and drink'** card, and follow this procedure for tracing inputs, ingredients, additives and processing aids.
- You must keep a record of who your wine was sold to, unless it was sold direct to the consumer.

S

Show



What do you need to show?

- You must show your verifier a **record** of:
 - proof that your grapes are safe (i.e. spray diary or supplier statement),
 - volume of grapes, juice or must received,
 - where they came from,
 - what variety of grape you used (only if it's on your product label),
 - all blends, transfers and top-ups.
- Your verifier might ask you who your wine was sold to (unless it was sold direct to the consumer).

DRAFT FOR CONSULTATION



Knowing what's in your food or drink

K

Know

What do you need to know?

- Food allergies can result in life-threatening reactions that can occur within minutes of eating or drinking the allergen.
- There are 11 common food allergens you must know about. These are sulphites, eggs, fish, shellfish, milk, peanuts, tree nuts, soybeans, sesame seeds, cereals containing gluten (e.g. wheat) and lupin.
- Some fining agents contain allergens (e.g. casein and egg white).
- You need to know, and be able to tell your customers, which foods you make and/or sell that could cause an allergic reaction so they can make an informed decision. You will need to be able to include this information on your product label if required. Follow the '*Packaging and labelling*' card.
- You need to know what's in all of the inputs, ingredients and processing aids that you use. If you are importing food, you must be able to understand the label.
- You need to know about additives and food composition rules in the Australia New Zealand Food Standards Code (the Code). You can find the Code here: <http://www.foodstandards.govt.nz/code/Pages/default.aspx>
- If you are making wine, cider or beer there specific additives and processing aids you can use. There are also limits for these that you need to follow. You can find the list of additives and processing aids in Schedules 15 and 18 of the Code.





- Not all additives or ingredients listed in the Code can be used in all overseas markets. If you're exporting you need to check that you're using approved additives for that market. Follow the '*Meeting export requirements*' card.

D

Do

What do you need to do?

- Read the labels of your ingredients and inputs. You must be able to understand them.
- You must check all of the ingredients in food, as well as sauces, garnishes served with, or added to food so you know which ones contain allergens.
- You must be able to clearly identify all food additives, ingredients and processing aids for making wine or cider.
- You must only use approved food additives and processing aids which are outlined in Schedules 15 and 18 of the Code. You must not exceed the maximum limit of a specific additive or processing aid.
- If you're exporting you must only use approved additives and ingredients for the market you're exporting to. Follow the '*Meeting export requirements*' card.
- You must keep details of the ingredients you use (e.g. **record** and follow your recipes so you know what allergens they contain).
- Tell your staff which foods contain any of the allergens listed in the **Know** section. You and/or your staff must know how important it is to be aware of allergies and allergens, and the effect they can have on your customers.



D

Do

- Either the day-to-day manager, or delegated person (name: _____) (tick as appropriate) must be able to talk to customers about what's in their food.

S

Show

What do you need to show?

- Show your verifier:
 - how you know what is in the ingredients you use,
 - how you know which additives and processing aids are safe to use in your food or drink, and how much you can use.
- Your verifier may ask you or your staff to tell them which foods contain allergens.



Separating

K

Know

What do you need to know?

- You need to know common allergens including sulphites, cereals containing gluten (e.g. wheat), shellfish, milk (other than distilled from whey), eggs, fish, peanuts, soybeans, sesame seeds, tree nuts and lupin, which could cause an allergic reaction if added to your food or drink.
- You need to know which allergens are in your food or drink. – you must include this information on the packaging, or be able to tell your customers if they ask.
- Poisons and dangerous chemicals can make people sick if they get into food or drink.

D

Do

What do you need to do?

- You must choose one of the following methods when preparing: (tick as appropriate)
 - raw and cooked/ready-to-eat foods,
 - foods that contain the allergens listed in the **Know**, and foods that don't contain those allergens,

D**Do**

use different spaces and equipment (chopping boards, knives and utensils), or

process at different times (cleaning and sanitising, if required, in between), and/or

thoroughly clean and sanitise surfaces, boards, knives and other utensils between use.

- Wash your hands and, if required, change protective clothing between handling:
 - raw and cooked/ready-to-eat foods,
 - food and drink that contain the allergens listed in the **Know**, and food and drink that don't contain those allergens, or
 - dangerous chemicals or poisons and food and drink.
- Keep all products not intended for human consumption (e.g. chemicals or sprays) away from food and food preparation areas.
- Label poisons and dangerous chemicals clearly, store them away from food and drink and make sure it is protected when using them.
- Label and store all food, ingredients and inputs that could cause an allergic reaction separately.
- If your food or drinks is not labelled, you must be able to tell your customers which products you have made and/or are selling contain allergens.
- When transporting your food or drink, separate:
 - raw and cooked/ready-to-eat foods,
 - foods and drinks that contain the allergens listed in the **Know**, and any that don't contain those allergens.

S**Show****What do you need to show?**

- Your verifier may ask your staff to explain how they know which food and drink you make contain allergens.
- Show your verifier that food and drink containing any of the allergens listed in the **Know**, and poisons and dangerous chemicals are clearly labelled and kept away from food.
- Show or explain to your verifier how you separate:
 - raw and cooked/ready-to-eat foods,
 - food and drink that contain the allergens listed in the **Know**, and products that don't contain those allergens, or
 - dangerous chemicals or poisons and food/drink.

DRAFT FOR CONSULTATION



Keeping foreign matter out of food and drink

K

Know

What do you need to know?

- Many food complaints made to authorities are related to finding foreign matter in foods.
- Foreign matter includes dead pests (e.g. flies, mice etc.), hair, fingernails, band aids, coins or jewellery, bits of cleaning cloth, razor blades, nuts, bolts, plastic and cardboard, stones, twigs, glass, metal shards, etc.
- It's especially important to manage the risk of broken glass when bottling wine or cider.

Why is managing the risk of foreign matter in foods important?

- Some foreign matter is unsafe, including hard or sharp objects like glass, hard plastic or stones etc. These can cause damage to the mouth, tongue, throat, stomach, intestine, teeth and gums.
- Keeping foreign matter out of food and drink is important and can be done in a variety of ways. This depends on the types of foods and chance of foreign matter occurring.
- Food is unsafe if you think it contains:
 - glass,
 - hard or sharp foreign matter that measures 7mm to 25mm, in length, or

K

Know

- hard or sharp foreign objects less than 7mm or between 25mm and 77mm in length and the primary intended consumers of the product are:
 - children under 6 years old,
 - elderly people,
 - people with dentures.
- Larger objects may not be a safety risk but can make your food and drink unsuitable.
- Foreign matter from people or pests that gets into food or drink that won't be treated (e.g. heated) to kill bugs (or after treatment to kill bugs) can cause people to get sick.
- Much of the foreign matter found would not cause illness or harm, but could damage your reputation.
- Even if foreign matter doesn't cause harm or make your customer sick, they will often link it to unsafe practices.
- Many of the procedures in this Plan will help, but you could also consider filtration or sieving, visual inspection, colour sorting, implementing jewellery policies for workers, metal detection, x-ray inspection, etc.

D

Do

What do you need to do?

- Implement procedures to prevent foreign matter getting into food or drink and/or to detect foreign matter in final products.
- Always make sure nothing in your process contaminates your food or drink with foreign matter.
- If used, you must calibrate and check the performance of any foreign matter detection equipment such as metal detectors, x-ray or colour-sorting units.

S

Show

What do you need to show?

- Show your verifier:
 - how you keep foreign matter out of food and drink, or check that it is not present in final products,
 - how you know any foreign matter detection equipment is regularly calibrated.

DRAFT FOR
CONSULTATION



Making wine or cider

K

Know

What do you need to know?

- You need to write down all the steps you complete to make each type of your wine or cider. It should cover all of the following:



Receiving fruit (or juice)

Record:

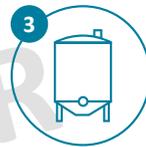
Origin*, variety*, supplier, spray diary (or supplier statement), weight, additions (e.g SO₂)



Extracting & collecting juice

Record:

Volume of juice*, additions (e.g SO₂, enzymes, acid)



Fermenting & maturing

Record:

Volume*, additions (e.g sugar, nutrients, yeast)



Racking & filtering

Record:

Volume*, additions (e.g SO₂, finings, acid)



Storing & blending

Record:

Volume and batch additions (e.g top-ups)



Bottling

Record:

Volume*, additions (e.g acid, sugar, SO₂)



* **Records** required for grape wine only.

K

Know

- Some types of food and drink, including grape wine, cider, fruit and vegetable wine, mead, beer and spirits are defined in the Australia New Zealand Food Standards Code (the Code). You can only use specified ingredients, additives and processing aids in defined foods.
- There are specific additives and processing aids you can use when making wine and cider.



Some overseas markets have different rules about the types and amounts of additives you can use in your wine.

- You need to store and transport wine and cider in a way that keeps it safe and suitable.
- All adjustments, additions and any other changes that are made to your wine, including while at off-site storage or being bottled, need to be covered by a food safety plan (e.g. this template). All changes made to your wine need to be recorded.
- If your premises **are** used to make anything that is not covered by this plan (e.g. a brewer shares your winemaking facility), you need to make sure that what they do doesn't affect the safety and suitability of your wine or cider.
- If you make wine for anyone else (e.g. brand owner), it's your job to give them all of the relevant information they need so they can get the label right and know which markets your wine can be exported to (if applicable).

D

Do

What do you need to do?

- You must write down all of the steps you complete to make your type of wine or cider.
- You must write down the type and amount of all inputs, ingredients and additives you use in each batch of wine or cider.

D

Do

- When buying fruit juice or bulk wine you must keep records to show the type and amount of all inputs, ingredients and additives you use in each batch of wine or cider.
- You must clearly label or keep production records to identify each wine at each step of production.
- Only use ingredients, additives and processing aids that are allowed for making wine and cider. Follow the *'Knowing what's in your food and drink'* card and Part 2.7 of the Code.



If making wine for export, you must only use additives and /or processing aids (check the OMARs) that are allowed in a particular market. Follow the *'Meeting export requirements'* card.

- If you make wine for anyone other than yourself/your business (e.g. brand owner), you must provide them with all of the information they need so they can bottle and (if applicable) export it. Follow the *'Packaging and labelling'* and *'Meeting export requirements'* cards.
- You must store and, if applicable, transport, wine and cider so it stays safe and suitable.
- All adjustments, additions and other changes made to your wine (e.g. during off-site storage or bottling) must happen at sites that are operating under a food safety plan (e.g. this template). You must keep a **record** of these.
- You must manage any activities at your premises that are not covered by this plan so they don't affect safety and suitability of the wine or cider you make.

S

Show

**What do you need to show?**

- Show your verifier **records** of:
 - all the steps in your process for each type of wine or cider you make,
 - the type and amount of all inputs, ingredients and additives you use in each batch of wine or cider,
 - any adjustments, additions or changes to your wine that were made while it was off-site and the food safety plan (e.g. this template) these were made under.
- Show or explain to your verifier:
 - how you know you are using the allowed additives and processing aids (i.e. how you're following the *'Knowing what's in your food and drink'* card and Part 2.7 of the Code),
 - how you store and, if applicable, transport wine to keep it safe and suitable,
 - how you manage any activities at your premises that are not covered by this plan,
 - if you make wine for anyone else, how you know what information to give them so they can bottle and (if applicable) export it.



Cooking food

K

Know

What do you need to know?

- Some foods are likely to be contaminated with bugs that will make people sick or die.
- Cooking is a common way to kill these bugs and make the food safe to eat.
- Foods that need to be cooked to be safe include poultry and meat.

D

Do

What do you need to do?

Cook poultry, minced meat and chicken livers using the *'Cooking poultry, minced meat and chicken liver'* card. Other meats can be served rare but must be seared before serving.

- Follow any manufacturer's instructions for cooking processed and ready-to-eat foods/ingredients.
- Always check dishes for cold spots, they must be cooked evenly and all the way through.
- Stir dishes frequently to avoid cold spots.
- Cooked food that is held between 5°C and 60°C, can be reheated again to above 75°C and served hot (above 60°C) within 4 hours, otherwise it must be thrown out.

D

Do

- Check the temperature of your food by:
 - using a probe thermometer to check the internal temperature of the food, or
 - using an infrared thermometer to measure the surface temperature of the food, or
 - using an automated system to monitor the internal temperature or surface temperature of your food (e.g. data logger).

S

Show

What do you need to show?

- Show your verifier how you know your food is always thoroughly cooked by:
 - taking the temperature of each item of food you cook, and/or
 - using the manufacturer's instructions.



Cooking poultry, minced meat and chicken liver

K

Know

What do you need to know?

- Cooking foods thoroughly kills harmful bugs.
- Some foods must be cooked thoroughly to kill bugs. You must know which of your foods are high risk and must be cooked thoroughly every time (e.g. chicken).
- Mincing meats means that any bugs on the surface may be spread through the product. Minced meat products must be thoroughly cooked.
- You don't need to take the temperature of thinly sliced poultry.

D

Do

What do you need to do?

- Cook poultry (e.g. chicken, duck, chicken livers) and minced or finely ground meat (e.g. sausages, meat patties) to specific temperatures for a set amount of time to make sure they are safe.
- Always use one of the following time/temperature combinations if you cook poultry, minced or finely ground meat, or chicken livers:

Internal temperature	Minimum time at temperature
65°C	15 minutes
70°C	3 minutes
75°C	30 seconds

D

Do

- Use a thermometer to check that the centre of the thickest part of the meat and/or poultry thicker than 4cm has reached one of the time/temperature combinations above.
- You must either:
 - **record** the temperature of at least 1 item from each batch, or
 - you must test each batch of poultry or minced meat you cook unless you can prove your method of cooking works every time. See the '*Proving the method you use to kill bugs works every time*' card.

Cooking processes
I check every time:

Cooking processes
I will 'prove':

.....

.....

.....

- Throw out any cooked poultry and minced meat which has been held between 5°C and 60°C, and reheated to above 75°C but not eaten within 4 hours.

S

Show



What do you need to show?

- Show your verifier **records** of how you safely cook poultry and minced meat. **Record:**
 - the food,
 - the date cooked,
 - the temperature the food was cooked to and how long it stayed at this temperature.
- If you can prove your cooking method works, show your verifier **records** required from the '*Proving the method you use to kill bugs works every time*' card.



Using water activity, acid or hot-smoking to control bugs

K

Know

What do you need to know?

- Harmful bugs need moisture to grow. Lowering the moisture content (water activity) of your food will help to stop their growth.
- Many harmful bugs cannot grow or grow very slowly in acidic environments (pH of 4.6 or less).
- To achieve the above conditions (respectively):
 - remove water (dry or brine) to achieve a water activity 0.85 or less,
 - lower the pH (pickle) to 4.6 or less.
- Hot smoking can help to stop bugs growing in your food but it may need further processing or cold storage to make sure it is safe. It can be used to cook your food or to flavour your food.
- This procedure applies to people who concentrate and dry food.
- MPI has developed a guide to help you calculate shelf life <http://www.foodsafety.govt.nz/elibrary/industry/determine-shelf-life-of-food/>
- There are rules in the Australia New Zealand Food Standards Code (the Code) about the types of food additives (e.g. preservatives) you can add to some foods. See the Code or ask your verifier for more information.

D

Do

What do you need to do?**Reducing water activity****Drying**

- Dried products must have a water activity of 0.85 or less unless they are either: (tick if one applies)
 - stored chilled at 5°C or below until it is use,
 - subject to other valid preservation methods (e.g. reducing pH)
- All drying equipment (e.g. heating, fans, humidifiers) must be regularly checked that they are working properly.
- Drying must take place: (tick as appropriate)
 - in a temperature-controlled space,
 - at ambient air temperatures.
- If you are making products with a water activity of 0.85 or less, you must test them to make sure they achieve this.
- If you have a proven method for drying your food to a water activity of 0.85 or less, you must send 3 batches of your product to an accredited lab for water activity testing. This must be done at least once initially, and then you can use your own method to calculate water activity (e.g. weight loss). See the *'Proving the method you use to kill bugs works every time'* card.

Brining

- During immersion brining, meat must be fully immersed in the brine.
- Empty and clean brining tanks regularly.
- Check injection equipment before and after each use for any broken or missing parts.

D**Do****Making food acidic**

- Pickled products must have a pH of 4.6 or less.

Brining and pickling solutions

- Only use permitted food additives. See the rules in the Code for the list of additives you can use.
- Make and use preparations following the manufacturer's instructions, or with own tried and tested recipes.
- Do not dilute the concentration of food additives (e.g. nitrite) and salt necessary to achieve brining and pickling.
- Stored chilled preparations at 5°C or below. Keep them covered until use.
- Carry out brining and pickling at 5°C or below.
- Throw out any recirculated or re-used preparations, and preparations which may be contaminated such as those used in injecting, at the end of each batch or day's operation.

Hot smoking

- If smoking seafood, use only fresh seafood.
- If hot-smoking is part of the cooking process for meat products, it must be cooked to a temperature of 75°C for at least 30 seconds. See the '*Cooking poultry, minced meat and chicken liver*' card.
- All smoke equipment (e.g. heating, air circulation, wood chips) must be safe and working properly.

D

Do

- Smoking must be carried out: (tick as appropriate)
 - in a temperature-controlled space,
 - with the smoking temperature manually controlled.
- The product must be spaced out evenly to help air circulation and even smoking of your product.
- Follow manufacturer's instructions when using liquid smoke.
- After your food has been smoked, food which needs to be kept cold must be stored at or below 5°C and must be: (tick as appropriate)
 - marked with the date and time it was smoked, and then either used, or sold to be consumed, within 5 days of processing,
 - given a 'use-by' date.
- Identify the reason that you are hot-smoking. Choose which applies:
 - hot-smoking to cook food,
 - hot-smoking to impart flavour.
- For each batch of food you hot-smoke as part of the cooking process, you must **record** the following:
 - the smoke house air temperature,
 - the smoking start time,
 - the smoking finish time,
 - the core temperature of the food at the end of the cooking period,
 - if additional time for cooking was required.
- For each batch of food you hot-smoke to flavour your food, you must **record** the following:

D

Do

- the smoke house air temperature,
- the length of time of the smoking process.

If you regularly dry, brine, pickle or hot-smoke your products, you can prove your method so that you only need to check batches weekly. See the *'Proving the method you use to kill bugs works every time'* card.

S

Show



What do you need to show?

Reducing water activity

- Show your verifier
 - any laboratory test results or results from your own method (e.g. weight loss) for water activity testing (if applicable),
 - how you safely dry and brine your food,
 - a written **record** of your method of drying food,
 - a written **record** of your recipe for brining solutions.

Reducing pH

- Show your verifier:
 - how you achieve a pH of less than 4.6,
 - a written **record** your recipe for pickling solutions.

Hot-smoking

- Show your verifier:
 - how you safely hot smoke your food.
 - if hot-smoking as part of the cooking process,

S

Show



- written **record** of:
 - the smoke house air temperature,
 - the smoking start time,
 - the smoking finish time,
 - the core temperature of the food at the end of the cooking period,
 - if additional time for cooking was required.
- If hot-smoking to flavour your food, a written **record** of:
 - the smoke house air temperature,
 - the length of time of the smoking process.

DRAFT FOR CONSULTATION



Proving the method you use to kill bugs works every time

K

Know

What do you need to know?

- If you make or cook any of the following foods, you can prove your method works to kill bugs every time:
 - poultry (e.g. chicken, liver),
 - minced meat (e.g. sausages, meat patties),
 - drying,
 - pickled or brined meat and/or vegetables,
 - hot smoked meat or seafood,
 - sushi (made with acidified rice),
 - Chinese style roast duck,
 - sous vide (meat or poultry).
- Proving your method works means that you don't have to test every single food item, each time you make it.

D

Do

What do you need to do?

- Identify the methods you will prove: (tick as appropriate)
 - poultry (e.g. chicken, liver)
 - minced meat (e.g. sausages, meat patties)
 - drying

D

Do

pickled or brined meat and/or vegetables

hot smoked meat or seafood

sushi (made with acidified rice)

Chinese style roast duck

sous vide (meat or poultry)

- You must use the same equipment and same ingredients (type, weight, size, vinegar solution etc.) every time you make the food.
- Make or cook the food/cooking equipment using the standard procedure from the relevant card.
- Check/test the food to make sure it is meeting the required limits (e.g. poultry and minced meat products are cooked to 75°C for at least 30 seconds, the pH of acidified rice is at 4.6 or below, water bath is at the correct temperature for sous vide).
- If your standard method doesn't meet the required temperature/limit, you must adjust your cooking temperature/ingredients to make your method work.
- Check your method works 3 times with different batches of food so you know it works.
- **Record** your method and checks.
- Check your method works every week by checking the temperature of 1 batch of food.

S

Show



What do you need to show?

- Show your verifier **records** of:
 - your method,
 - your weekly batch checks.



Cooling freshly cooked food

K

Know

What do you need to know?

- You must cool food correctly, so that it does not stay in the temperature danger zone (5°C–60°C) long enough for bugs to grow to unsafe levels.
- If you don't cool hot food quickly, bugs will grow and make your food unsafe and unsuitable.

D

Do

What do you need to do?

- Cool food quickly to stop bugs growing or producing toxins.
- When cooling freshly cooked food it must get from:
 - 60°C to 5°C (or below) in less than 6 hours or it must be thrown out,
 - 60°C to room temperature or 21°C (whichever is colder) in less than 2 hours, then room temperature or 21°C (whichever is colder) to 5°C (or below) in less than 4 hours.
- Use any (or a combination) of these methods: (tick as appropriate):
 - placing your food into shallow containers
 - using an ice bath
 - separating your food into smaller portions
 - placing your food in a blast chiller

D

Do

- Once your food is at room temperature or 21°C (whichever is colder), put it in the fridge or chiller.
- Check after 4 hours that food is at 5°C or below.
- Throw out any freshly cooked food which has been in the temperature danger zone for more than 6 hours.

S

Show



What do you need to show?

- Show or describe to your verifier how you cool freshly cooked food quickly.
- Show your verifier **records** of how you safely cool each batch of freshly cooked food (i.e. 60°C to room temperature or 21°C (whichever is colder) in less than 2 hours, then room temperature or 21°C (whichever is colder) to 5°C (or below) in less than 4 hours.
- Write down:
 - the food,
 - date the food was cooked,
 - the time it took to cool down.



Keeping food hot

K

Know

What do you need to know?

- You must keep foods that would normally be kept cold or hot out of the temperature danger zone (5°C - 60°C) to stop bugs from growing and making people sick.
- Hot food must be kept above 60°C to stop bugs growing.

D

Do

What do you need to do?

- Follow manufacturers' instructions for using equipment.
- Heat food to 75°C or more before placing in a bain-marie or hot cabinet.
- Your equipment must keep food above 60°C. Use a thermometer to check the temperature of the food.
- When food is being kept hot for more than 2 hours, check the temperature every 2 hours so you are sure it is above 60°C.
- If the 2 hour check shows that the food temperature is too low, reheat food to above 75°C and increase the temperature of the bain-marie or hot cabinet. If it's below 60°C at the next check, throw it out.
- If hot food has been held at a temperature below 60°C for more than 2 hours, it must be thrown away.

D

Do

- If hot food has been held at a temperature below 60°C for less than 2 hours, it can either be:
 - thoroughly reheated and served hot (above 60°C), or
 - cooled to below 5°C within four hours and kept at this temperature until it is eaten.
- Stir food to ensure it is kept hot all the way through.
- Do not mix old and new batches of reheated or hot, ready-to-eat food.

S

Show

What do you need to show?

- Show your verifier:
 - how you keep food hot,
 - how you measure temperature,
 - how you know you're checking temperatures in the required time limits.



Reheating food

K

Know

What do you need to know?

- You must reheat food safely so that it does not stay in the temperature danger zone (5°C–60°C).
- If you don't reheat food correctly, bugs will grow and make your food unsafe and unsuitable.
- Vending machines must reheat food safely.
- Bain-maries and hot cabinets do not reheat food. They keep food warm once it has been cooked or reheated.

D

Do

What do you need to do?

- Use the right equipment to reheat food quickly:
(tick as appropriate)
 - microwave
 - stovetop
 - oven
 - other _____
- Reheat food until steaming hot (at least 75°C) in the coolest part (if a liquid) or the middle (if solid) and keep it above 60°C until it is used.

D

Do

- Reheated food that is held between 5°C and 60°C, can be reheated again to above 75°C and served hot (above 60°C) within 4 hours, otherwise it must be thrown out.
- Vending machines that reheat food must reheat it to at least 75°C in the coolest part and keep the food above 60°C until it is used.

S

Show

What do you need to show?

- Show your verifier:
 - how you safely reheat food to above 75°C,
 - how you know the food you reheated was above 75°C,
 - how you know your vending machine reheats food safely.



Displaying food and customers serving themselves

K

Know

What do you need to know?

- Food can become contaminated by sick people or dirty clothing.
- Your customers can bring bugs into your food business. Harmful bugs can be transferred to foods through a sick person's faeces, vomit and other body fluids (e.g. snot and blood).
- Poorly arranged self-serve displays can increase the risk of customers transferring bugs to your food, (e.g. reaching across food).

D

Do

What do you need to do?

- Ready-to-eat food for customer self-selection must be: (tick as appropriate):
 - pre-wrapped before display, or
 - protected with sneeze guards and covers.
- If you are serving hot food, you must follow the rules for **'Keeping food hot'** card.
- Display ready-to-eat foods that would normally be kept cold or hot for no more than 4 hours (after more than 4 hours between 5°C and 60°C it must be thrown away).

D**Do**

- Always provide clean serving utensils. Utensil handles must not touch the food. Replace utensils when dirty (e.g. customer drops spoon on the floor) or the batch or dish changes.
- Have dedicated serving utensils for foods that contain the allergens listed in the **Know** in the '*Separating*' card and foods that don't contain those allergens.

S**Show**

What do you need to show?

- Show your verifier:
 - how you make sure that food for self-service is kept safe, (e.g. how you take temperature of your food, how long that your food is left out for),
 - how you display your food for self-service and stop your customers contaminating your food.



Defrosting food

K

Know

What do you need to know?

- Juices from defrosted food can contain harmful bugs. If these juices get onto other food and surfaces they can make people sick.
- If food is only partially defrosted, it may not reach the correct temperatures during cooking to destroy bugs.

D

Do

What do you need to do?

- Plan ahead if using frozen food so you have enough time to thaw it safely, either in the fridge or chiller.
- When provided, thaw products according to manufacturer's instructions.
- Keep food being defrosted in a container and near the bottom of the fridge/chiller to stop juices from spreading onto surfaces and other foods.
- If you can't defrost food in a fridge/chiller, you can use any (or a combination) of these methods:
(tick as appropriate)

thaw in the microwave and use food immediately

thaw under running cold water in an air tight container

defrost on the bench for no more than 4 hours

D

Do

- Once thawed, foods that are normally kept cold or kept hot must be refrigerated, cooked or kept hot.
- Food must be fully defrosted before being reheated or cooked.

S

Show

What do you need to show?

- Show your verifier:
 - how you defrost your food,
 - how you keep defrosted food safe.

DRAFT FOR
CONSULTATION



Packaging and labelling

K

Know

What do you need to know?

- Unsafe and/or unsuitable packaging can make your food and drink unsafe. You need to know that the packaging you use is suitable for use with food and drink so it keeps your product safe.
- Not all foods have to be labelled, but for those that are, the labels must meet the rules in the Australia New Zealand Food Standards Code (the Code), or if you are exporting you need to meet the export market's rules.
- Some foods can become unsafe over time, even though it still might look, smell and taste OK. It's important to let your customer know when to eat your food by, by calculating the shelf-life and providing a Best Before or Use By date. You need to make sure you calculate this date correctly.

Package

- Only use packaging that doesn't cause, or contribute to, food becoming unsafe or unsuitable.
- Check that packaging is intended for your type of foods or use.
- Handle and store packaging with the same care as a food, ingredient or input.

K

Know

Why is packaging important?

- Packaging protects your food from becoming unsafe or unsuitable.
- Anything that touches your packaging (i.e. bugs, chemicals or foreign matter) can make your food or drink unsafe or unsuitable.

Labelling

- You must meet the rules about labelling in the Code, or specified by the export market, for any foods you label.
- Some countries have different requirements for percentage and labelling statements. NZ Winegrowers provides an international wine labelling guide which is available in the member only section of their website (www.nzwine.com).
- If you are supplying bulk foods, these will generally need to be accompanied with a packing or specification sheet. You must supply the same information that would go on the food label.
- If your food doesn't have to be labelled, you must still be able to tell your customers:
 - what's in the food,
 - any warning statements,
 - if the food is made from or contains genetically modified ingredients or irradiated foods,
 - information about the variety, vintage or area of origin for grape wine.



Why is labelling important?

- Labels allow your customers to make good and safe food choices.

K

Know

- Some of your customers may have medical conditions (e.g. allergies) which require them to include or avoid certain foods in their diet.
- Consistency in the layout of label (e.g. having a nutrition information panel and using minimum font sizes) can help your customers make good food choices.
- MPI has developed a guide to help you create your food label. Follow '**A guide to food labelling**' www.mpi.govt.nz/document-vault/2965 to write your label.

Why calculate the shelf-life of a food?

- You may need to work out the shelf-life of a food so that you can apply either a Use By or Best Before date.
- There is a guide to help you work out shelf-life. Follow '**How to determine the shelf-life of food**' <http://mpi.govt.nz/document-vault/12540>
- Food that has a shelf-life of more than 2 years, does not need to be date marked.

D

Do

What do you need to do?

Package

- If you are packaging food:
 - implement procedures for ensuring packaging will not cause, or contribute to, food or drink becoming unsafe or unsuitable,
 - check that packaging is suitable for use with food and drink when you buy it. Either:
 - purchase packaging labelled as being suitable for food, or
 - get an assurance from your supplier that it is food grade,

D

Do

- calculate the food's shelf-life, and apply the appropriate date marking, identify whether you need to **either**:
 - label your food, or
 - provide a packing or specification sheet with bulk foods (e.g. catering packs).

Label

- You must meet the rules about labelling in the Code for any foods you label.
- Labels or specification sheets must include:
 - name of the food,
 - lot/batch identification,
 - name and address of your New Zealand or Australian business,
 - any applicable advisory statements, warning statements and declarations,
 - any conditions for storage and use,
 - ingredients list (not required for alcoholic products),
 - date marking (e.g. Use By, Best Before etc.) (not required for alcoholic products),
 - net contents,
 - alcohol content,
 - standard drinks,
 - nutrition information panel (not required for alcoholic products),
 - information about nutrition, health and related claims (only if you've made a claim),





- you can't make health claims about alcoholic beverages, but you can make claims about carbohydrate, energy and gluten,
- information about characterising ingredients and components,
- if the product is or has been made with genetically modified foods or irradiated foods.



- If your grape wine label includes a statement about a single grape variety, vintage or area of origin, at least 85% of the wine must contain that grape variety, be made in that vintage or come from that area.*
- If your grape wine label includes a statement about a blend or combination of grape varieties, vintages or areas of origin, at least 85% of the blend must contain those grape varieties, be made from those vintages or come from those areas. Your wine label must list these in descending order from greatest to least amount in your blend.*

**Brandy or other spirits to fortify grape wine, and yeasts (less than 50ml/L) can be excluded from these calculations.*

- You must not include a claim about grape variety, vintage or area of origin if the wine has a higher percentage of wine from another grape variety, vintage or area of origin.
- If exporting grape wine, you must follow any labelling rules that are specified by the export market.



S

Show



What do you need to show?

- Show your verifier:
 - your packaging and how you know it is safe and suitable for the foods you are packaging,
 - your food and drink labels and how you know what to put on them,
 - how you know your grape wine label statements about grape variety, vintage or area of origin are correct and true,
 - how you know your label complies with the requirements of any applicable overseas market,
 - how you worked out the shelf-life of your food.

DRAFT FOR CONSULTATION



Transporting

K

Know

What do you need to know?

- You need to make sure you do not contaminate any food, wine or cider when transporting it.
- When transporting food that would normally be kept cold or hot, you must take steps to keep the food out of the temperature danger zone (5°C - 60°C) to stop bugs growing.

D

Do

What do you need to do?

Plan before transporting

- All parts of the vehicle that touch food that you use to transport food or food equipment must be clean (and sanitised if going to be in direct contact with ready-to-eat food).
- Throw out:
 - any food that has become contaminated,
 - food that has been kept in the danger zone for more than 4 hours.

Control temperatures

- Food must be transported and delivered at the correct temperature. You must regularly check this.
- Keep frozen food frozen.
- Only deliver food in the temperature danger zone if it's going to be eaten within 4 hours of entering the temperature danger zone.

D

Do

- Transport chilled food at or below 5°C to keep it safe and suitable.
- Use appropriate equipment for transporting food so you know your food will be safe. Use: (tick as appropriate)
 - insulated bags/boxes
 - portable chillers
 - hot-holding equipment
 - truck/tanker
 - other _____

S

Show



What do you need to show?

- Show your verifier:
 - your vehicle used for transporting food,
 - how your vehicle is cleaned,
 - how you make sure food is kept at the correct temperature when being transported,
 - how you keep wine or cider safe from contamination when being transported,
 - what method you use to maintain temperatures and keep foods separate while transporting food.
- A **record** of the temperature your food was transported at if it needs to be kept at a certain temperature if it was not used within 4 hours.



When something goes wrong

K

Know



What do you need to know?

- Things don't always go as expected. You must have a procedure for dealing with things that go wrong in your plan.
- You must keep **records** for at least 4 years.
- You must keep **records** for at least 7 years.
- Your **records** need to show how affected wine or cider was disposed of.
- **Records** must clearly describe what went wrong, who was involved and how the problem was fixed.

D

Do

What do you need to do?

- Take immediate action as soon as a problem affecting food safety and/or suitability is identified. **Record** the action that you took.
- Use your **records** to look over the past week/few days. Determine if anything has gone wrong in your plan, for example:
 - fridge temperatures were too high,
 - there was a sign of pests,
 - received food was not at the correct temperature,
 - food or ingredients were transported at the incorrect temperature,

D

Do

- sulphur dioxide was too high,
 - self supply water becomes contaminated,
 - food or drink is incorrectly labelled,
 - grapes or fruit for making wine or cider were contaminated.
- If something's gone wrong, identify where the problem started and how many times it happened. Identify if a procedure is missing from your plan.
 - If the food or drink you have processed is unsafe or unsuitable, you must identify if:
 - a recall is required,
 - you need to isolate any food or drink and stop it from being sold or used,
 - it could be reprocessed to make it safe and/or suitable.
 - Fix the problem yourself or tell the person responsible for that area about the problem.
 - Keep a **record** of any reprocessing you have done to make your product safe and suitable.
 - Keep a **record** of any drink that was disposed of and how you disposed of it.
 - Take action to prevent the problem from happening again (e.g. retraining staff).
 - Keep clear, accurate and complete **records** for at least 4 years.
 - Keep clear, accurate and complete **records** for at least 7 years.
 - Notify your verifier as soon as possible if any of your food has become unsafe or unsuitable when following any procedures in your plan.



S

Show



What do you need to show?

- Show your verifier your **records** from times where things have gone wrong.
- You must show your verifier a **record** of:
 - what the problem was,
 - what you did to immediately fix the problem,
 - any reprocessing you've done,
 - what changes you made to stop the problem from happening again,
 - how you kept food safe or made sure no unsafe and unsuitable food or drink was sold,
 - any drink that was disposed of and how you disposed of it.



DRAFT FOR
CONSULTATION



Dealing with customer complaints

K

Know

What do you need to know?

- You must be able to identify if the complaint is about food safety, suitability or quality.
- Customer complaints about food safety and/or suitability must be dealt with immediately.
- You must have someone responsible for dealing with customer complaints.

D

Do

What do you need to do?

- Identify who is responsible for dealing with complaints:
day-to-day manager or
delegated person
(tick as appropriate)
Name: _____
- Identify if the complaint is about food safety, suitability or quality.

D

Do

- If the complaint affects the food safety and/or suitability of a batch or individual item/dish, you must:
 - separate it until it is proven to be safe, or
 - throw out affected food or drink and associated ingredients.
- You must:
 - check that food that has been in the same area or has been prepared at the same time,
 - identify where the problem started,
 - fix the problem,
 - take action to prevent the problem from happening again.
- Notify your verifier:
 - if someone who eats your food ends up sick, or
 - could end up sick if they eat or drink your product.

S

Show



What do you need to show?

- Show your verifier a **record** of all of the following if the complaint is about food safety or suitability:
 - the contact details of the person who made the complaint,
 - the date and time of the purchase,
 - your food that was affected including the batch/lot ID,
 - what the complaint was about,
 - the cause of the problem,
 - the action you took immediately and the action you took to prevent it from happening again.



Recalling

K

Know

What do you need to know?

- Food and drink that is unsafe or unsuitable can make people sick.
- You must be able to recall your food or drink if there's a problem.
- The **records** you keep may help you in the event of a recall.
- Keeping good **records** means a recall can be conducted faster and more efficiently, minimising cost and impact on your reputation.
- There is helpful information about recalling food on the MPI website:
<http://www.foodsafety.govt.nz/recalls-warnings/>
- There can be 2 reasons for recalls:
 - 1 your supplier may need to recall a food product or piece of equipment or packaging you use, or
 - 2 you may need to recall the food you have made from your customers because something went wrong in your process.

D

Do

What do you need to do?

- If something has gone wrong and your product becomes unsafe or unsuitable you must:
 - be able to identify if your food or drink has been affected,

D**Do**

- identify if the recalled food or drink is on display, in storage or been used as an ingredient in another food,
 - identify if the recalled food or drink contact item (e.g. a screw top cap) is being used in your business,
 - follow all of the instructions in the recall notice,
 - separate any recalled inputs, ingredients, additives, processing aids and/or food or drink you have made and label it as 'Recalled – do not use',
 - tell your supplier how much of their affected product is at your food business,
 - arrange for affected product to be picked up and disposed of.
- If you have made and sold food or drink which is unsafe or unsuitable, you must do all of the following:
 - call 0800 00 83 33 and ask for the Food Compliance team (if during work hours) or ask for the on-call MPI Food Safety (if calling after hours),
 - complete the recall hazard/risk analysis form and send it to your Food Safety or Wine Officer <http://www.foodsafety.govt.nz/elibrary/industry/recall-hazard/index.htm>
 - you must report to MPI your decision to recall within 24 hours,

D

Do

- draft a newspaper advertisement using the appropriate template:
 - food recall notice template – General products
http://www.foodsafety.govt.nz/elibrary/industry/Food_Recall_Warning-Advertisement_Microsoft.rtf
 - food recall notice template – Allergen warning
http://www.foodsafety.govt.nz/elibrary/industry/Food_Recall-Advertisement_Microsoft.rtf
- send the newspaper advertisement to your Food Safety or Wine Officer for approval. Publish the advertisement once approved. All advertisements must be approved by your Food Safety Officer before publishing,
- ask your Food Safety or Wine Officer if there is anything else you have to do (e.g. point of sale notice (Food recall notice template - Point of sale: http://www.foodsafety.govt.nz/elibrary/industry/Food_Recall-Microsoft_Word.rtf), press release (Example press release: http://www.foodsafety.govt.nz/elibrary/industry/Example_Press-Demonstrates_Main.htm), radio advertisement, website notice) and complete as required.



- You must tell MPI if any of the wine you've exported:
 - is refused entry into a market,
 - doesn't meet the importing market requirements,
 - doesn't have or no longer has the required official assurance (certificate).



- You must tell MPI what you've done to fix any of the above problems.
- Test your recall procedures occasionally by holding 'mock recalls'.

S

Show



What do you need to show?

- Show you verifier:
 - the procedure or plan you have in place to recall food or drink if you need to,
 - **records** for any mock recalls you have carried out,
 - a **record** of:
 - completed recall hazard/risk analysis form,
 - a copy of the recall notice.
 - **records** of any export related problems and what you did to fix the problem.



Making sushi with acidified rice

K

Know

What do you need to know?

- Adding vinegar solution to rice makes it acidic. Harmful bugs cannot grow as well in acidified rice.
- You can make sushi with acidified or non-acidified rice. Sushi made with non-acidified rice cannot be kept for as long as sushi made with acidified rice.
- You must get the pH of your rice right so you don't harm your customers (i.e. if rice is too acidic (pH less than 2.4) you could burn someone's throat, if it's not acidic enough (i.e. more than 4.6) bugs can grow).
- Brown rice cannot be acidified because the hard surface coating on the grain stops the vinegar solution from soaking in.
- There are rules about how long sushi can be left outside of temperature control. The 2-hour/4-hour rule is modified for sushi made from acidified rice.

D

Do

What do you need to do?

Make non-acidified rice using white or brown rice

- Cool cooked rice from 60°C to room temperature or 21°C (whichever is colder) within 2 hours and to 5°C in another 4 hours.
- Do not keep sushi and/or onigiri above 5°C for more than 4 hours.

D

Do

Make acidified rice

- You must only acidify white rice.
- Make and add a vinegar solution to your rice as soon as it is cooked. You must **record** the amount of vinegar solution you use.
- After acidifying your rice you must test the pH by mixing 1 part clean water with 3 parts acidified rice (e.g. ¼ cup clean water mixed with ¾ cup rice with vinegar).
- Test the pH of your acidified rice mixture using one of the following (tick which one you use):

pH strip

pH paper

calibrated pH meter

- Each batch of rice must have a pH of between 4.6 and 2.4.
- You must test each batch of rice you acidify, unless you can prove your method of acidifying works every time. See the *'Proving the method you use to kill bugs works every time'* card.
- You must cool acidified rice from 60°C to room temperature or 21°C (whichever is colder) in 2 hours, and to 15°C or less within another 4 hours.
- You must store acidified rice at temperatures between 5°C and 15°C for no more than 8 hours, after which it must be thrown out.
- You must not mix leftover rice with freshly prepared rice.

D

Do

Display sushi made with acidified rice safely

- You must store:
 - nigiri pieces between 5°C and 15°C for no more than 8 hours, or else throw them out,
 - nori rolls between 5°C and 15°C for no more than 12 hours, or else throw them out.

(The times above include any time the acidified rice was between 5°C and 15°C before the sushi was shaped)

S

Show

**What do you need to show?**

Show your verifier:

- how you safely make sushi with non-acidified rice,
- how you safely make sushi with acidified rice including:
 - how you make your vinegar solution,
 - how you measure the pH of your rice,
 - a **record** of the pH measures of your rice,
- how you safely display sushi.



Making Chinese style roast duck

K

Know

What do you need to know?

- Harmful bugs grow rapidly in the temperature danger zone.
- Boiling water kills bugs. The vinegar helps to stop bugs from growing while the duck is drying.
- Keeping the skin intact stops bugs from getting onto, and growing on, the meat.

D

Do

What do you need to do?

Preparation

- Defrost frozen duck thoroughly.
- Dip the duck in boiling water, vinegar and other ingredients (as used in your recipe).
- Hang the duck to dry in a cool area for no more than 6 hours.
- Check the temperature of the duck, with a thermometer, at the start and half way through the drying process. The internal temperature must not be more than 25°C.

Cooking

- The duck must be roasted (see '*Cooking poultry, minced meat and chicken liver*' card).

D**Do****Display/storage**

- Use the hanging hook to carry the duck. The duck must not be touched.
- Keep the duck's skin intact. It must not be broken during display and storage. If the skin breaks, cut the meat up and keep it above 60°C until served.
- Only display and store duck in a well ventilated, cool and dry area to prevent moisture build up (i.e. keep out of enclosed glass cabinets).
- Ducks must not touch each other or any other products on display or during storage. Move them away immediately if they touch.
- If ducks have accidentally been in contact with each other for a long time, you must cut them up and reheat the meat to 75°C. Then either:
 - keep the meat at or above 60°C until it's served, or
 - cool the meat from 60°C to 21°C within 2 hours, and from 21°C to 5°C in the next 4 hours and store at or below 4°C.
- Wrapped duck must not be on display for more than 5 hours.
- Remove and dispose of any duck that has been on display for more than 22 hours.

D**Do****Drying**

You must:

- re-boil any water that's used to dip the ducks if the mixture has cooled down,
- move any ducks that have a core temperature higher than 25°C during the drying process to the chiller until the temperature drops below 25°C,
- throw away any ducks that have been hung to dry for a period longer than 6 hours.

S**Show****What do you need to show?**

- Show your verifier a written **record** of:
 - the temperature of each duck at the time it was hung up to dry and the time that drying started,
 - the temperature of the duck halfway through the drying process and what you did to bring it down if it was higher than 25°C,
 - the time the duck was taken from the drying area to be cooked.



Making doner kebabs

K

Know

What do you need to know?

- Raw doner kebab meat may contain bugs which can contaminate ready-to-eat food.
- You must cook meat thoroughly to kill bugs.

D

Do

What do you need to do?

Preparing a kebab spit

- Only use fresh meat from an approved supplier.
- Store meat below 5°C until needed.
- Prepare spits away from areas where salads, dips, sauces and cooked food is kept.
- Only use thin cuts of meat when forming the spit.
- Protect prepared spits from dirt and other contamination.
- The length of the formed block of meat must not be longer than the length of the burners.

Cooking and serving

- Doner kebab cooked on a vertical grill must be cooked before serving.
- The outside of the doner kebab must be thoroughly cooked before thin slices of meat are shaved from the outside surface.

D**Do**

- Shaved meat must be collected before falling into the drip tray.
- Heating elements must be kept on and not turned down when the doner kebab starts cooking.
- When minced meat spits are cooked from frozen, shaved meat must undergo further cooking on a griddle/hot plate prior to use.
- Any shaved meat that has not been cooked thoroughly must be further cooked by using a hotplate or grill.
- If the doner kebab has not been completely used at the end of service you must:
 - throw it away, or
 - carve off any part cooked meat from the skewer. Cook thin slices on the grill/hotplate. Cool the cooked shaved meat, cover it and store in the fridge. The next day it may be reheated and served.
- You must cool the raw meat that remains on the skewer to room temperature or 21°C (whichever is colder) within two hours and to below 5°C within a further four hours.

S

Show

**What do you need to show?**

- Show your verifier:
 - A written **record** of how you safely cooked poultry and meat including:
 - the food,
 - the date cooked,
 - the temperature the food was cooked to and how long it stayed at this temperature.
- Show or describe to your verifier:
 - how you cool hot food quickly;
 - how you know the food you reheated was above 75°C,
 - how you keep food hot,
 - how you measure temperature.



Cooking using the sous vide method

K**Know**

What do you need to know?

- The sous vide method cooks foods at temperatures in the danger zone (at or below 60°C). It is possible to do this safely – but only by managing this process very carefully. Mistakes can lead to people getting sick or dying.
- Cooking foods at a lower temperature takes longer to kill bugs.
- If the cooking temperature is too low, bugs cannot be killed.
- Harmful bugs will survive and grow if you do not follow the time and temperatures below.
- This process only works for meat and poultry cuts.
- This process does not cover whole birds (e.g. chicken, duck), fish or cooking in a sous vide oven. If you wish to do this, you will need to develop a custom FCP and complete the scientific research to prove you can do this safely.

D

Do

What do you need to do?

- When preparing meat and poultry cuts to be sous vide, you must keep raw and ready-to-eat foods separate by either: (tick as appropriate)
 - not using your vacuum sealer for ready-to-eat foods if it is used for raw meat, or
 - cleaning and sanitising your vacuum sealer between using it for ready-to-eat foods,
 - cut meat and poultry pieces into equal portions so they are the same size, weight and shape,
 - store vacuum sealed product prepared for sous vide in the fridge until it is used.
- When setting up your water bath, you must:
 - calibrate water baths at least monthly,
 - make sure water is always able to circulate freely,
 - only use cooking equipment which has accurate and consistent temperature control,
 - preheat your water bath to at least 55°C for red meat and 60°C for poultry,
 - have good water circulation in your water bath,
 - change the water in the water bath after each batch.
- When cooking using the sous vide method, you must:
 - always completely submerge packs and make sure they are evenly distributed,
 - **record** the water bath temperature regularly or use an inbuilt data logger,

D**Do**

- always keep the water bath temperature above 55°C when cooking red meat and 60°C when cooking poultry at all times,
- the meat or poultry must reach the temperature of the water bath within 4 hours, if it takes longer, it must be thrown out.
- always test the temperature of the meat or poultry using a needle probe thermometer at the thickest part of the meat or poultry,
- always test the meat or poultry which has been in the coolest part of the water bath,
- check the temperature of the thickest part of the meat or poultry:
 - at the start of cooking the batch, and
 - before the start of the holding time, and
 - at the end of cooking the batch,
- check that the vacuum seal has not been broken after taking the temperature,
- always finish cooking one batch before adding chilled food to the water bath.

D

You must only use the following time and temperature combinations: (the times below are holding times, they only start once your product has reached the required temperature).

Do

Internal temperature and holding times				
Internal food temperature °C		Cook-serve: Serve immediately or within 2 days of cooking		Cook-Chill: Serve immediately or within 5 days of cooking
		All meats except poultry Time (Minutes/hours)	Poultry Time (Minutes/hours)	Red meat and poultry Time (Minutes/hours)
Temperature danger zone *	55	420 mins / 7 hrs	Poultry must not be sous vide at temperatures lower than 60°C	If storing sous vide red meat or poultry for longer than 2 days, do not cook at temperatures lower than 60°C
	56	296 mins / 4 hrs 56 mins		
	57	208 mins / 3 hrs 28 mins		
	58	147 mins / 2 hrs 27 mins		
	59	104 mins / 1 hr 44 mins		
60	73 mins / 1 hr 13 mins	56 mins	91 mins / 1 hr 31 mins	
61	52 mins	40 mins	63 mins / 1 hr 3 mins	
62	36 mins	29 mins	44 mins	
63	26 mins	21 mins	30 mins	
64	18 mins	15 mins	21 mins	
65	13 mins	11 mins	15 mins	
66	9 mins	8 mins	10 mins	
67	7 mins	6 mins	7 mins	

*minimum time once product has reached this temperature

D**Do**

- Once meat and poultry has been cooked, you must keep it in its bag until it is ready to be used and either:
 - serve it directly from the bag,
 - remove it from the bag, sear it (or cook it in some other way) and serve immediately,
 - keep it in the bag, cool it quickly by following the *'Cooling freshly cooked food'* card and store it below 5°C for up to 2 days (only if you use the cook-serve method)
 - keep it in the bag, cool it quickly and store it below 5°C for up to 5 days (only if you use the cook-chill method).
- You must label cooked food with the date and time it was made, the type of food it is, whether it is cook-serve or cook-chill, and throw out date.

Proving your method

- If you don't want to take the temperature of every batch you cook, you can prove your method of cooking works every time. See the *'Proving the method you use to kill bugs works every time'* card.

S

Show



What do you need to show?

- Show or tell your verifier:
 - how you calibrate water baths at least monthly,
 - **record** of:
 - water bath temperatures before the food was added to the water,
 - the time taken for the food to reach the selected internal temperature,
 - the length of holding time once the food reached the selected food temperature,
 - internal temperature of the food at the start and the end of holding time,
 - cooling time (for products cooled and stored for later service).

DRAFT FOR CONSULTATION



Preparing red meat for mincing and serving lightly-cooked or raw

K

Know

What do you need to know?

- This process only covers red meat – beef, lamb and venison. This process does not cover pork, chicken, duck or livers.
- This process only needs to be followed if you choose to serve red meat lightly-cooked or raw.
- Bugs are found on the surface of whole cuts of meat. Mincing meat spreads the bugs from the surface all the way through the meat.
- It only takes a few harmful bugs to make people sick.
- The only way to make meat safe to be served lightly-cooked or raw is to kill the bugs on the surface of the meat before it is minced.
- There are 3 ways to reduce the number of bugs on the outside of meat – sear it, blanch it or sanitise it.
- Bugs can be hidden under flaps, in cavities and between the seams of whole cuts of meat. Make the outside of the meat smooth by removing any parts which could stop the searing, blanching or sanitising solution from killing bugs.
- All additional ingredients used with the sanitised red meat (e.g. seasonings, binders etc.) must be safe and suitable for use.
- You do not need to follow the rules about cooking minced red meat on the '**Cooking poultry, minced meat and chicken liver**' card if you follow this procedure.

D**Do****What do you need to do?**

- You must choose one of the following methods:
 - searing, or
 - blanching, or
 - using sanitising solution.
- You must only use cuts of meat with a smooth surface. (E.g. prime cuts like sirloin, rump, thick flank, silverside, topside).
- You must either:
 - trim any seams, obvious flaps and/or cavities before searing, blanching or sanitising so the entire surface of the meat is evenly treated, or
 - cut or trim the meat into smaller portions (i.e. no flaps or cavities) before searing, blanching or sanitising so the entire surface of the meat is evenly treated.

Searing

- When searing, all surfaces of the meat (including any fat layer) must come into contact with the oiled hot plate, grill or pan.

Blanching

- When blanching, you can choose to blanch the meat either unwrapped or in a vacuum-sealed bag. If you use a vacuum-sealed bag, all surfaces of the meat must come into direct contact with the bag.
- The meat must be fully covered by water or stock that is at a rolling boil, for at least:
 - 30 seconds if it is not in a bag, or
 - 60 seconds if it is in a vacuum-sealed bag.

D**Do****For both searing and blanching**

- You must rapidly chill the seared or blanched meat by either:
 - placing the meat in an ice slurry, or
 - putting the meat in the fridge, or
 - putting the meat in the freezer.

Using sanitising solution

- When sanitising, you must only use one of the following chemicals: (tick as appropriate)
 - lactic acid
 - peroxyacetic acid (POAA)
- You must not use a lower or higher concentration of sanitising solution.
- The whole piece of meat must always be fully covered by the sanitising solution. All surfaces of the meat must come in direct contact with the sanitising solution.
- You must use a new sanitising solution for each piece of meat you sanitise.

Using lactic acid

- You must use a solution that is between 2—5%.
- You must dip the whole piece of meat in the solution for 9 seconds. The solution must be used at 55°C.

Using POAA

- You must use a concentration of between 150—220 parts per million.
- The concentration of hydrogen peroxide must be 75 parts

D**Do**

per million or less (note: if using pre-prepared concentrate, you don't need to do this).

- You must dip the whole piece of meat in the solution for 10–15 seconds (no more than 30 seconds) at room temperature.

For all methods

- All meat that has been seared, blanched, or sanitised must be used within a maximum of 48 hours.
- Formed patties must be used within 24 hours or frozen immediately for later use.
- Thawed patties must be used within 24 hours.
- All seared, blanched, or sanitised meat must be stored at 5°C or less when not being used or handled.

S**Show****What do you need to show?**

Show or describe to your verifier:

- how the method you have chosen is followed exactly, every time,
- how you kill the bugs on the outside of whole cuts of meat,
- how you handle the meat after it has been either seared, blanched, or sanitised,
- how you ensure, blanched, seared or sanitised meat is used within 48 hours,
- how you mince red meat safely and use the resulting patties within 24 hours,
- how you mince red meat safely.

S

Show

Sanitising solution method

- Show or describe to your verifier:
 - how you prepare the sanitising solution,
 - how you know you have used the right:
 - chemical, and
 - concentration, and
 - temperature, and
 - amount of time to kill bugs.

DRAFT FOR
CONSULTATION