

3. HOUSE RULES

HOT & COLD TEMPERATURE CONTROL

FOR RETAIL BUSINESSES USING RETAILSAFE AND HANDLING BOTH HOT AND COLD FOOD

The House Rules Section contains 8 sub-sections, each of which covers a different food safety management subject. Once you have completed the Business Selector you will have selected the House Rules relevant to your type of business.

Every House Rule sub-section begins with guidance and then provides advice on how to write your own House Rules.

A template is then provided for you to use when writing your House Rules. Once completed, this should reflect your current safe working practices.

WHAT YOU NEED TO DO

- Read the guidance provided at the beginning of this sub-section
- Draw up your own House Rules describing how you intend to manage hot and cold temperature control in your business
- Once you have completed all your House Rules, remember to update your Action Plan

Think about the hot and cold temperature control practices that you already have in place. It is possible that you will simply have to write these down to produce your HOT AND COLD Temperature Control House Rules.

THE HOT AND COLD TEMPERATURE CONTROL HOUSE RULES ARE AN ESSENTIAL COMPONENT OF YOUR HACCP BASED SYSTEM AND MUST BE KEPT UP TO DATE AT ALL TIMES



This sub-section will give guidance on Temperature Control and is intended for businesses that handle both **HOT AND COLD** food. At the end of the sub-section you will be asked to write your own House Rules to show how you manage **HOT AND COLD** temperature control in your business

HAZARDS (What can go wrong)

- **Microbiological Contamination** - Harmful bacteria are a hazard present in many of the foods handled in retail businesses. If these bacteria are not controlled they may multiply to dangerous levels and cause food poisoning.

CONTROLS (How you can prevent the hazard)

Bacteria are invisible to the naked eye and cannot be physically removed from food. All we can do is control their numbers. There are, however, two main ways in which temperature can be used to achieve this:

1. You can destroy harmful bacteria, or reduce their numbers, by cooking or reheating
and
2. You can control their growth by keeping food either hot or cold

MONITORING (Checking your Control Measures)

When using HACCP based procedures, you are required to check that your Critical Limits are being met. This checking is referred to as **Monitoring**. The most reliable method of monitoring temperatures is by the use of a suitable thermometer – a procedure often referred to as Probing. However, it is not always necessary or appropriate to use a thermometer. In such cases, other methods may be more practical.

At the end of this sub-section, you will be asked to draw up House Rules for **HOT AND COLD** Temperature Control. These House Rules should include the Critical Limits for each process step and the Monitoring procedures you will follow.

For example, you may decide that you refrigerate high risk foods at a maximum of 5°C. Similarly, you may decide that your freezer should operate at a maximum of -18°C. These temperatures would then be the Critical Limits for **Refrigerated Storage** and **Frozen Storage** respectively.



- Temperature dials built into refrigerators, chills and cold displays indicate the air temperature within the appliance. This can be useful for day-to-day monitoring but should be checked regularly with a hand held digital thermometer as a back-up check.
- Chill sandwich filling ingredients before placing in the display cabinet, for example tuna and jars of mayonnaise.
- Don't switch off the refrigerators and freezers overnight to save electricity costs.
- Don't overstock display cabinets, chills and freezers.
- Don't use the pie/hot display cupboard to reheat foods.

What are the key temperature controls in a Retail Food Business?

PROCESS STEP	TEMPERATURE CONTROL MEASURE/CRITICAL LIMIT
INCOMING STOCK	<ul style="list-style-type: none"> • Transport/accept chilled food at your specified temperature, for example 5°C or below • Transport/accept frozen food at your specified temperature for example -18°C or below <p>Alternatively it may be appropriate when collecting food to set a time limit for the journey back to the shop. The shorter the journey time, the lower the temperature of the food on arrival</p>
STORAGE	<ul style="list-style-type: none"> • Store chilled food at your specified temperature, for example 5°C or below • Store frozen food at your specified temperature, for example -18°C or below
PREPARATION	<ul style="list-style-type: none"> • Keep cooked/ready-to-eat food within the refrigerator or chill until it is required, then prepare/handle without delay • Thoroughly defrost all frozen foods in a refrigerator, chill or cool area • Thoroughly defrost all frozen foods prior to cooking or reheating (unless specified otherwise by the food manufacturer)
COOKING	<ul style="list-style-type: none"> • If cooking minced meats, sausages or poultry ensure that the centre reaches a suitably high temperature, for example 75°C or above
COOLING	<ul style="list-style-type: none"> • Hot food should be cooled as quickly as possible and then refrigerated • If possible, cool food in small portions or shallow containers • Avoid placing 'hot' food in refrigerators
REHEATING	<ul style="list-style-type: none"> • Reheat food thoroughly until the core temperature is not less than 82°C. This is not required if the food will be spoiled by reheating to this level or if the food was cooked prior to arriving at your premises. Alternative Time/Temperature combinations can be used for reheating in these circumstances, for example 70°C for 2 minutes
HOT HOLDING/ HOT DISPLAY	<ul style="list-style-type: none"> • All foods held hot prior to sale must be kept at above 63°C. These foods should be placed in appropriate equipment, for example a pre heated hot cabinet, as soon as possible after cooking or reheating
COLD DISPLAY	<ul style="list-style-type: none"> • Chilled foods being displayed cold should be kept under refrigeration at your specified temperature for example 5°C or below until sold

These key temperatures are referred to as 'Critical Limits'. There may be alternative Critical Limits which are more suitable for you, for example setting a maximum time to transport the food. The Critical Limits that you choose must be sufficient to ensure that the food is safe to sell. For further advice, contact your Enforcement Officer.

THERMOMETERS

In many cases, the temperature of food can be checked using a probe thermometer. Ideally, a hand-held digital thermometer should be used when probing foods and checking air temperatures. This may be supplemented by additional “in-place” thermometers which may be located in refrigerators, chills and cold display cabinets.



- Thermometers should be kept clean at all times - sanitised/disinfected before/after each use.
- It is important that you regularly check that your thermometer is working correctly. This can be done by taking a reading in iced water. When using this method, the temperature reading should be between -1°C and +1°C. Alternatively, you might take a reading in boiling water. In this case, the temperature reading should read between 99°C and 101°C.
- If your thermometer check is outside the temperature ranges noted above, the unit should be replaced or returned to the manufacturer to be recalibrated.
- Under no circumstances should a mercury-in-glass thermometer be used as it would present a contamination risk if it were to break.

CHECKING COLD TEMPERATURES



It is essential that the Critical Limit is achieved on every occasion, regardless of the temperature control method used

- It is advisable to check all refrigerator, chill and cold display cabinet temperatures at the start of the working day and at some other part of the day.
- Avoid checking the temperature of refrigerators, chills and cold displays immediately after the door/lid has been open for any significant period of time or during a defrost cycle.
- Avoid puncturing the packaging of wrapped food when checking temperatures. In this case, temperature readings should be taken from between the packs.

Monitoring Freezers

- **Function** - When checking that a freezer is functioning properly, it may be sufficient to make sure that contents are still obviously frozen and that there is no visible evidence of defrosting. If you choose to check the function of your freezer, it would be good practice to do an occasional check with a hand-held digital thermometer, as backup. You should specify the frequency of these checks in your House Rules.
- **Temperature** - Alternatively you may prefer to check the temperature in the freezer using a hand-held digital thermometer.

CHECKING HOT TEMPERATURES

- The temperature of a food may vary throughout, especially during cooling and heating. In the case of soups and other “liquid” foods being cooked or reheated, it is essential that food is stirred to ensure adequate distribution of heat before probing
- When ‘Hot Holding’ food the temperature is best measured by probing the food itself

IMPORTANT! You must determine the frequency of HOT temperature monitoring in your House Rules. For example:

- When cooking food such as soups, curry, poultry and sauces (sold hot) you may decide to probe at regular intervals during the cooking process to ensure the food is being properly cooked.
- When displaying hot food, you may set a maximum time limit on the display of the product combined with regular monitoring of the temperature dial (if appropriate) on the equipment. In this case you would use a check with a hand-held digital thermometer as a back-up check.
- When cooling food, you could set a time limit for the cooling period and check that the product is capable of being refrigerated by that time.

Hot Temperature Monitoring – Without using a Thermometer

Certain foods may not require to be probed every time they are cooked, cooled or reheated. This may be because there are other ways of ensuring that the Critical Limit has been achieved.

For example:

- **Visual checks** - When cooking items such as bacon, it may be sufficient to make a visual check that the bacon is thoroughly cooked.
- **Time/Temperature combination** - When cooking or reheating individual portions on a repeated, identical basis, it may be sufficient to repeat the exact procedure on every occasion. For example reheat a carton of soup for 2 minutes in the microwave oven, on full power and stir the contents after 1 minute.

SUMMARY

- Whatever temperature control method is being used, it is essential that the Critical Limit is achieved on every occasion. However, this does not mean that every item of food which is being held cold, cooked, reheated or hot held needs to be monitored using a thermometer on every occasion.
- It will, however, be essential that occasional checks are made with a thermometer. Also, even if you don’t probe a food, you will still be required to monitor some aspects of the procedure, such as the visual appearance of the food or the cooking time. A predetermined appearance or cooking time should be used in such instances.
- Certain foods present no risk when undercooked, for example most vegetables. The cooking temperature of such foods need not be monitored.
- Your methods of temperature monitoring will be dependent on the knowledge and understanding of your staff handling food together with the effectiveness and efficiency of your work equipment.
- You are provided with an example form in the **Records** Section that can be used to record HOT AND COLD temperature monitoring. The form can be adapted to suit your business, remember it is your decision which records are appropriate for you.

You must determine your methods of temperature Monitoring in your HOT AND COLD Temperature Control House Rules

WHAT YOU NEED TO DO NOW

To effectively manage the **HOT AND COLD** temperature control part of your HACCP based system, use the information in this sub-section for guidance, go to the next page then write a list of House Rules for you and your staff.

How to draw up your Temperature Control House Rules

- Consider what you do – ‘RetailSafe’ requires that you consider the various Temperature Control procedures that are followed in your business
- Write these procedures down in the table – in other words, write down the temperature control measures that are applied at each process step. A table which can be used for this purpose may be found at the end of this sub-section. Remember to include a Critical Limit for each process step
- Refer to the key temperature controls table at the start of this sub-section for guidance on suitable Critical Limits. Alternatively, you may wish to specify other temperatures which are more appropriate for your business
- Write down how you will monitor temperature control – state the monitoring procedure you intend to use to ensure your Critical Limit has been achieved. Remember to state clearly the frequency of monitoring and describe how this will be recorded

Here is an example of how you could write your House Rules :

Process Step	Temperature Control Measure and Critical Limits	Monitoring Method, Frequency, Record Used
COOKING	<p>Beef burgers and sausages to be cooked to a core temperature of 75°C or above</p> <p>- Check the labelling for allergens</p>	<p>One item to be probed daily</p> <p>Checks made above recorded on the HOT AND COLD Record</p>

MONITORING (Checking your Control Measures)

Once you have completed your House Rules for Temperature Control, you must then monitor their use.

RECORDING (Keeping a Record of your Monitoring)

Keep a Record of the Monitoring you carry out. This can be done by using or adapting the HOT AND COLD Record located in the ‘**Records**’ Section of this manual.

CORRECTIVE ACTION (What to do if things go wrong)

If you find that your Temperature Control House Rules are not being followed, you must make a record of the problem you have identified and the action you have taken to correct it (this is known as a Corrective Action).

For example if you usually cook beef burgers using a **Time/ Temperature combination** (the portion size, time and temperature are always the same) and you change your supplier. You may find that by following your original time temperature combination these beef burgers may not be fully cooked. The Corrective Action would be to continue cooking, probe at the end of cooking to check the core temperature and revise your Time/ Temperature combination and if you employ staff train them in your new procedure. **This information can be entered in the HOT AND COLD Record.**

It is required that all Records of Monitoring, at a frequency decided by you, and any other Corrective Action(s) taken be kept for an appropriate period of time to demonstrate that your HACCP based system is working effectively.

Action Plan

Once you have completed all your House Rules, remember to update your Action Plan.

TEMPERATURE CONTROL HOUSE RULES

Enter a statement of your **Temperature Control House Rules** in the table below:

Process Step	Temperature Control Measure and Critical Limits	Monitoring Method, Frequency, Record Used
INCOMING STOCK		
STORAGE		
PREPARATION		
COOKING		

Process Step	Temperature Control Measure and Critical Limits	Monitoring Method, Frequency, Record Used
COOLING		
REHEATING		
HOT HOLDING/ HOT DISPLAY		
COLD DISPLAY		

Signed Position in the business Date

The Temperature Control House Rules are an essential component of your HACCP based system and must be kept up to date at all times.