

Temperature Checks

To comply with the law

The Food Hygiene (England) Regulations 2006 require that certain foods be kept at temperatures, which are either too hot or too cold to allow harmful bacteria to grow. Foods covered by this legislation are those which are likely to support the growth of harmful bacteria or their toxins – they are called “high risk” or “ready to eat foods” and they include:

- Dairy products including cream desserts, soft and semi-hard cheeses.
- Cooked products including those containing meat, eggs, fish and milk.
- Smoked or cured, ready to eat meat or fish.
- Prepared ready to eat foods.
- Uncooked or partly cooked pastry and dough products containing meat, fish or vegetables

If these foods are stored within the DANGER ZONE (8°C to 63°C) harmful bacteria can multiply to numbers capable of causing serious illness. These foods should be kept in refrigerated storage or be kept hot except for short periods whilst foods are being prepared or when food is awaiting service for immediate consumption.

The Regulations require that foods which require chilled storage, are kept at or below 8°C. Remember that the law refers to the temperature of the food and not the temperature of the fridge. Monitoring the air temperature using a fridge thermometer or digital probe thermometer (an electronic probe thermometer) can give an indication of product temperature and it is recommended that an air temperature of between 0 and 5°C. is maintained.

The regulations require that if food is to be kept hot its temperature should be monitored to ensure it stays above 63°C. It is recommended that any hot food is initially heated or reheated to at least 75°C. for 30 seconds. These temperatures should be monitored to ensure they are being achieved.

How to check temperatures

Refrigerated Storage

A number of different methods are available to enable fridge temperatures to be monitored. Catering equipment is often fitted with thermometers, which display the air temperature externally on a gauge. Small fridge thermometers can be kept inside fridges and freezers. Digital probe thermometers can be used to monitor the temperature in fridges and freezers and can be used to check the accuracy of other thermometers.

In fridges and freezers monitoring the air temperature can indicate whether or not the unit is working properly (remember that defrost cycles will temporarily raise the temperature). Air temperature readings should always be taken from the warmest part of the fridge, this is usually the top of a conventional upright fridge or the returning air of a display cabinet.

If the air temperature is higher than 5°C taking the surface temperature of the food will give a good indication of the food itself. A probe should only be inserted into foods if its temperature cannot be determined in any other way. If food does have to be probed, it is important to ensure that this operation does not cause contamination. The probe should be disinfected before use and cleaned after use. Special antibacterial probe wipes can be purchased for this purpose. If packaging materials are damaged by using the probe the food should be discarded.

Hot Foods

It is recommended that a digital probe thermometer is used to check the centre temperatures of food and that this is disinfected before use and cleaned after use.

Where possible when testing hot food a “sample” should be used which can be thrown away after testing, e.g. an individual portion of food, a meat pie, a sausage, a plated or packed meal. The sample food can then be treated in the same way as other food so that the temperature monitoring reflects the temperature of all the foods held with it.

An effective system of temperature monitoring would include the following steps:-

1. Following **delivery** of chilled and frozen high risk foods.
2. During **storage** in freezers and fridges. Preferably at the start of the working day and prior to closure.
3. Following **cooking**. Checking at least one representative sample per batch of food to confirm that core temperatures have reached 75°C. for 30 seconds.
4. Prior to **service**. Where food is held in heated or in chilled storage prior to serving. Hot food must be kept above 63°C. and chilled food must be held below 8°C.
5. Following **reheating**. Foods should be heated to above 75°C. for 30 seconds.

Keeping records

The regulations require that you keep written records of the monitoring that you carry out. This will enable you to show them to the Public Protection Officer when they visit to confirm that you are complying with the law and to provide evidence showing that you have taken all possible actions to prevent harm or illness occurring from the food you provide.

The monitoring and recording of temperatures is a key feature of your hazard analysis and could be used as part of your defence if action were taken against you under the Food Hygiene (England) Regulations 2006.

You should to retain written records of all monitoring carried out for at least one year.

It is recommended that readings are entered on a log, which provides a long-term record of the temperature monitoring you have carried out. If a member of staff takes the temperature readings they should have sufficient training to ensure they are aware of why it is important to monitor temperatures, they know how to correctly take and record the temperatures, and they know what action to take if the necessary temperature is not achieved.

Obtaining accurate readings

It is important to ensure that readings obtained are accurate. It is therefore recommend that a digital probe thermometer be used to check temperatures. This thermometer can be tested monthly by placing the probe in boiling water or melting ice and checking the temperatures displayed, which should be 100°C and 0°C respectively. If the probe displays a temperature more than 1°C outside this range it should be sent for recalibration or replaced. You should record on your monitoring log when this calibration has been carried out.

Further advice

This leaflet provides advice on temperature monitoring, if you would like further information on the regulations, you can contact a Public Protection Officer in the Food Section at the telephone number below, or you can write to us at the address below if you would like any further advice.

Blackpool Council
Quality Standards Division,
Food Control Group
125 Albert Road, Blackpool, FY1 4PW
Tel: (01253) 477477 Fax: (01253) 478324

Simple examples of temperature monitoring records

1. **Cold Temperatures** Targets: Fridges 0°C - 05°C.
Freezers -18°C

Date	FRIDGES				FREEZERS		COMMENTS	TIME/INITIALS
	1	2	3	4	1	2		

2. **Hot Temperatures** Targets: Cook/Reheat 75°C.
Hot/Cold -63°C

DATE	FOOD	TEMPERATURE	COMMENTS	TIME/INITIALS

NOTE If monitoring shows that temperatures fail to reach targets appropriate action must be taken.

Fridges and Freezers - Check temperature again in 30 minutes, if temperature is still too high call engineer, remove foods and put into correct storage temperature after checking that no deterioration has occurred.

Hot Temperatures - continue heating until target temperature is achieved.