

## Inspection in Food Factories 2007/08

**SIM 01/2007/01**

**Target Audience:**

FOD inspectors inspecting food factories  
Specialist inspectors (Ergonomics, Slips prevention and DRP)

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## **SUMMARY**

This SIM sets out targetting guidelines and links to guidance for inspection in the food and drink manufacturing industries.

## **BACKGROUND**

1 There are 30 separate food and drink manufacturing industries ranging from slaughterhouses to whisky distilling. These industries occupy nearly 6000 factories and employ around 465,000 workers. The bakery and meat sectors are the largest employing two-thirds of food industry workers.

2 The food/drink manufacturing industries have the highest overall injury rate and highest O-3-D injury rate of all manufacturing activities (except recycling) and are also among the highest for major injury rates. The overall injury rate for food manufacture is almost twice the manufacturing average and the food/drink industries cause 25% of all manufacturing injuries.

3 Since 1990/91 HSE has been running a 'Recipe for Safety' initiative jointly with the food and drink manufacturing industries. This initiative is described and promoted in HSE publication **A Recipe for Safety (HSG252)** now in its third edition. The initiative continues to concentrate on the main causes of injury and occupational ill health in the food/drink industries and has resulted in an impressive 37% reduction in the overall injury incidence rate over the past 15 years. Inspection during 2007/08 contributes to this initiative, which will also be pursued at national level by the A&F Sector working with trade associations through the Food Manufacture H&S Forum.

## **FOOD/DRINK MANUFACTURE INSPECTION 2007/08**

### **Investigation and enforcement**

4 Investigations of accidents and complaints and all enforcement work should be carried out as per HSE's Operational Procedures. This SIM does not cover these activities.

### **Proactive inspection**

5 Priority should be given to inspection of food/drink industries with the higher injury rates. The larger of these industries are:

- dairy/cheese production;
- drink manufacture - brewing and soft drinks;
- slaughtering and processing of poultry and meat;
- fish processing;
- animal feeds and pet foods; and
- bakeries.

6 Inspection should be targeted primarily at the following topics:

### **Musculoskeletal disorders (MSD)**

6.1 Manual handling injuries in food/drink manufacture cause the greatest proportion of injuries, comprising 36% of RIDDOR reported injuries. Research by the Food Industry Medical Association (FIMA) concluded that back pain was the major cause of ill health in food manufacture with ULDs being the third highest cause (in second place was mental ill health). Additionally, in the food sector, upper limb disorders (from repetitive production line work etc) comprise 38% of compensation cases under the Department of Work and Pensions Industrial Injuries Scheme. All employees are at risk, particularly those handling heavy loads or those carrying out repetitive lifting or production tasks without controls.

6.2 Priority should be given to the industries listed in para.5, as these industries have the higher injury rates. Particular emphasis should be placed on the 5 main causes of MSD risk in food/drink manufacture:

- 1) stacking/destacking (e.g. boxes, sacks, containers)
- 2) pushing/pulling (e.g. wheeled trolleys, oven racks, non-wheeled loads)
- 3) manual handling of drinks containers (e.g. delivery of kegs, crates to licensed premises)
- 4) packing products (e.g. cheese, confectionery, biscuits)
- 5) cutting, boning, jointing, trussing and evisceration (e.g. meat and poultry).

6.3 Industry specific guidance:

**Moving food and drink – 100 case studies (HSG196)**

Injuries and ill-health caused by handling in the food/drink industries (FIS23)

Reducing injuries caused by sack handling in the food/drink industries (FIS31)

Roll cages and wheeled racks in the food and drink industries: reducing manual handling injuries (FIS33)

**Manual handling in drinks delivery (HSG119)**

**Slips and trips**

6.4 Slips and trips in the food/drink industries comprise the greatest proportion of major injuries (37%) and also 26% of O-3-D injuries. Furthermore slips and trips in food manufacture occur at a rate 2.6 times the manufacturing average. Some 90% of slips result from wet or contaminated floors. All employees in these industries are at risk. A national survey by inspectors in 2000/01 indicated that slips risks were significant in 63% of food/drink premises. Trips account for only 14% of slips and trips in the food industry.

6.5 During routine food processing the actual risk is likely to be of possible serious injury, in the absence of management controls. However a probable risk of serious injury will exist if there are likely to be added consequences, for example carrying hot liquids or a slip which might cause a fall from height.

6.6 Priority should be given to the industries listed in para.5, as these industries have the higher injury rates. Particular emphasis should be placed on keeping floors dry and free from food product. Where it is not reasonably practicable to keep floors dry, appropriate

slip resistance should be offered by the floor and footwear. Research clearly indicates that floors which have sufficient micro-roughness to prevent slips can still be hygienically cleaned.

6.7 Industry specific guidance:

**Slips and trips – guidance for food processing industry (HSG156)**

**Slips and trips: summary guidance for the food industry (FIS6)**

**Stop Slips (HSE video)**

### **Dermatitis**

6.8 Occupational dermatitis in food manufacture is caused by contact with water, soaps and detergents (55% of cases) and contact with a wide variety of food (40% of cases) such as sugar, flour/dough, citrus fruits, vegetables, spices, fish and seafoods, meat and poultry.

6.9 In food preparation dermatitis usually affects the hands and forearms. It affects an estimated 8500 people in the food and catering industries each year.

6.10 Industry specific guidance:

Occupational dermatitis in the catering and food industries (FIS17)

Controlling exposure to disinfectants used in the food/drink industries (FIS29)

### **Noise**

6.11 Noise in food/drink manufacture accounts for about 75% of the industry's occupational health insurance claims. Most food/drink industries are affected, for example drinks, meat, milling, bakery and dairy. Noise levels can be high either in large areas (e.g. bottling halls) or locally from noisy plant and machinery (e.g. product impact on hoppers or meat bowl choppers).

6.12 Industry specific guidance:

**Sound solutions for the food and drink industries – 60 case studies (HSG232)**

Reducing noise exposure in the food and drink industries (FIS32)

### **Occupational asthma**

6.13 Occupational asthma in food manufacture occurs primarily in the bakery industry and is caused by inhalation of dust from grain and flour. Bakers have the second highest incidence rate of asthma among all occupations in all industries. Inspection should concentrate on small and medium sized bakeries as these have a much higher incidence of asthma than large plant bakeries. For further guidance **see SIM 01/2007/02 Inspection 2007/08: Flour dust in bakeries.**

6.14 Industry specific guidance:

**A Baker's Dozen – 13 essentials for a safer bakery (HSG233)**

**Safe interventions enforcement initiative**

6.15 HSE Manufacturing Sector's Safe Interventions Initiative is aimed at preventing fatal and major injuries to people involved in clearing blockages or performing running repairs inside dangerous machines due to unexpected start-up. The categories of machines being targeted include packaging machinery, the greatest proportion of which is used in

the food/drink manufacturing industries. This initiative now also covers work in confined spaces.

Safety at flat belt conveyors in the food and drink industries (FIS25)

Packaging machinery: Thermoform, fill and seal machines (FIS26)

Packaging machinery: Palletisers and depalletisers (FIS27)

Packaging machinery: Pre-formed rigid container machines (FIS28)

### **COMPLETION DATE**

7 The above topics can be inspected at visits to food and drink factories during inspection year 2007/08.

### **SECTOR CONTACTS**

8 For further information please contact the following Agriculture & Food Sector inspectors:

Bob Hadway (VPN 513 2849, email: robert.hadway@hse.gsi.gov.uk)

- Bakeries (including flour dust) and Poultry industry (including Avian flu)

Alastair Mitchell (VPN 536 3608, email: alastair.mitchell@hse.gsi.gov.uk)

- Meat industry

Richard Morgan (VPN 521-3111, email: richard.morgan@hse.gsi.gov.uk)

- All other food/drink industries and topics (including 'Recipe for Safety' initiative)

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