



## Priorities for health and safety in the fish processing industry

### Food Sheet No 16

#### Introduction

This sheet has important information for employers and employees in the fish processing industry. Your attention will be drawn to the particular aspects of the working environment which deserve special attention. The information in this sheet is based on an analysis of accidents reported to HSE and local authorities. Experience shows these are the most significant risks. You should assess all the aspects discussed in this sheet carefully to make sure that adequate precautions are in place, and that they are in place permanently. Usually, once a risk is identified, it will be clear what the appropriate precaution is. If you need further guidance on a particular topic, please refer to the Useful information section.

#### The priorities

Since 1990 three fatalities have occurred in the fish processing industry. Two involved the use of fork-lift trucks. The third involved a member of the public who was struck by a factory gate.

Table 1 sets out the main kinds of accidents to employees from 1989-1992 in order of priority. It also outlines which aspects of the working environment are involved. The table shows that 85% of injuries could be prevented by paying particular attention to:

- the safety of manual handling;
- slips/trips - keeping floor surfaces free of slippery substances and obstacles and providing slip-resistant floor surfaces;
- machinery safety, conveyors and bandsaws in particular;
- safe movement and stacking of raw materials and finished products;
- handling of cleaning chemicals.

#### Occupational ill health

The accident reports do not cover ill health. But experience of the industry suggests the occupational health priorities are likely to be:

- chronic ill health from manual handling;
- occupational asthma resulting from exposure to proteinaceous materials from processing salmon, trout, and crustacea;

- noise-induced hearing loss;
- ill health from long-term working in a cold and wet environment.

#### The risks compared with other industries

In 1991-1992 the overall incidence rates, that is the number of injuries per 100 000 employees, were 207 for major injuries and 3710 for injuries totalling over a three day absence, 3917 overall. The figures used are the most recent available. The current trend has worsened.

This makes the industry the sixth most risky of the 19 sectors of the food industry. The rates are almost twice the average for the manufacturing industry generally.

#### Scope of this guidance

This guidance uses reports from employers whose main activity is coded to Standard Industrial Classification (1980) 4150. This covers processing of fish and shellfish.

#### Safety checklist

The checklist below includes the most common situations which cause accidents, as well as a list of preventative measures.

#### Handling

- avoid heavy lifting. Where not reasonably practicable to mechanise, assess the factors leading to the risk and take appropriate precautions, especially to ensure safe lifting techniques are followed.

#### Slips/trips

- provide containment for spillages from plant and equipment;
- situate drainage to avoid soaking of whole floor surface;
- clean up spillages promptly;
- provide slip-resistant floor surfaces;
- carry out effective cleaning of floor surfaces;
- organise the workplace to ensure that trolleys and product do not create a tripping hazard;

**Table 1**

<i>Cause</i>	<i>Relative importance</i>	<i>Significant factors</i>
Handling	31% of all reported accidents	58% of accidents from loads too heavy to handle.
Slips and trips	20% (accounts for 34% of major injuries)	62% of accidents linked to slippery surfaces.
Machinery	11% (accounts for 22% of all major injury accidents)	Conveyors, bandsaws and packaging equipment are the three main types of equipment linked to incidents. Bandsaw accidents could have been prevented by the use of jigs, sliding tables and last slice devices.
Struck by moving objects	9%	11% attributed to hand tools, including knives.
Strike against	9%	74% of all accidents involved contact with fixed items in the workplace, suggesting that layout is critical.
Exposure	7%	41% of accidents were connected with splashes of hot or harmful substances. Cleaning fluids and ammonia refrigerants are the substances most commonly involved.
Falls	6%	47% of all accidents involved stairs.
Transport	3%	Fork-lift truck operation accounted for 86% of the accidents.

- avoid uneven floors. Ramps at cold stores cause particular problems.

### **Machinery**

- ensure that machines are properly guarded and maintained in that condition;
- conveyors which are often modified and moved should not be overlooked;
- site bandsaws correctly and use jigs and sliding tables to minimise approach to the blade.

### **Struck by or against objects**

- provide good access to storage areas;
- prevent overloading of trolleys taking into account the height of the load.

### **Exposure**

- select the least hazardous material for the operation;
- train employees in the use of hazardous substances (use of wrong materials frequently causes accidents).

### **Falls**

- build in permanent access wherever possible. Provide proper ladders, stepladders and access equipment. Set out strict rules for the safe use of access equipment.

### **Transport**

- designate routes for vehicles. Select the type of fork-lift to suit the workplace and train operators.

### **Useful information**

- 1 *Essentials of health and safety at work* 1994 HSE Books ISBN 0 7176 0716 X
- 2 *Health and safety in retail and wholesale warehouses* HS(G)76 1992 HSE Books ISBN 0 11 885731 2
- 3 *A recipe for safety: Health and safety in the food industry* TOP 05 1994 HSE Books ISBN 0 7176 0911 1 (available in priced packs of five)
- 4 *An index to health and safety guidance for the food industry* FIS7 1996 HSE Books
- 5 *Manual handling: Solutions you can handle* HS(G)115 1994 ISBN 0 7176 0693 7
- 6 *Slips and trips: Guidance for the food processing industry* HS(G)156 1996 ISBN 0 7176 0832 8
- 7 *Safety in meat preparation* HS(G)45 1995 HSE Books ISBN 0 7176 0781 X
- 8 *Safe use of knives* Safety Guidance Note No 10 from the British Meat Manufacturers Association (0171 935 7980)
- 9 *Safe use of ladders, step ladders and trestles* GS31 1994 HSE Books ISBN 0 11 883594 7

10 *Rider operated lift trucks - operator training: Approved Code of Practice and supplementary guidance* COP26 1988 ISBN 0 7176 0474 8

11 *Workplace transport safety, guidance for employers* HS(G)136 1995 HSE Books ISBN 0 7176 0935 9

12 *Preventing asthma at work: How to control respiratory sensitisers* L55 1994 HSE Books ISBN 0 7176 0661 9

13 *A step by step guide to COSHH assessment* HS(G)97 1993 HSE Books ISBN 0 11 886379 7

14 *Noise at work. Noise Guide No 1: Legal duties of employers to prevent damage to hearing. Noise Guide No 2: Legal duties of designers, manufacturers, importers and suppliers to prevent damage to hearing. The Noise at Work Regulations 1989* 1989 HSE Books ISBN 0 7176 0454 3

15 *Safe management of ammonia refrigeration systems* PM81 1995 HSE Books ISBN 0 7176 0166 7

16 *Workroom temperatures in places where food is handled* FIS3 1996 HSE Books

HSE priced and free publications are available by mail order from: HSE Books, PO Box 1999, Sudbury, Suffolk CO10 6FS Tel: 01787 881165 Fax: 01787 313995.

HSE publications are also available from good booksellers.

For other enquiries ring HSE's InfoLine Tel: 0541 545500, or write to HSE's Information Centre, Broad Lane, Sheffield S3 7HQ

This publication may be freely reproduced, except for advertising, endorsement or commercial purposes. The information it contains is current at 2/97. Please acknowledge the source as HSE.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.