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Health and Safety Executive		Sector Information Minute	
Commercial and Consumer Services, Transportation and Utilities Sector (CACTUS)		SIM 05/2002/50 (formerly SIM 03/2002/06)	
Cancellation Date	17/06/2006	Open Government Status	Fully Open
Version No & Date	1: 17/06/2002	Author Unit/Section	Utilities National Group

Target Audience:
FOD Inspectors

MANUAL HANDLING RISKS IN THE PARCEL CARRYING INDUSTRY

This SIM has been produced to assist inspectors with manual handling topic inspections of the parcel carrying industry.

BACKGROUND

1 The industry has been growing steadily over recent years in particular with the increase in home shopping. The major companies can now offer comprehensive national/international delivery services.

2 There are about 25 major companies operating in the UK. However several of these operate through franchise agreements with the franchisee often incorporating the national carriers name into their own company name. Also some companies operate road haulage/logistic operations under the same company name. There are also a large number of smaller operators who do not provide a national distribution network but pass on and receive work from the larger companies.

ENFORCEMENT RESPONSIBILITY

3 Parcel carriers come under SIC 61420 'Couriers'. HSE decided to pass motorbike/bicycle couriers to local authorities (LAs) on the basis that their premises were office activities.

4 Some carriers also provide warehousing facilities and confusion can therefore arise over allocation between HSE and the LAs. For a parcel carrier to be allocated to HSE it should meet the following criteria:

- 1) parcels are not normally kept on the premises for more than two working days;
- 2) there is a collection and delivery service involving mixed sized parcels from more than one consignor;
- 3) a warehousing/call-off service is provided which involves less employee hours than the normal parcel delivery service (if this only applies to a small number of premises operated by a national company then with local agreement of the LA it may be appropriate to keep the premises with HSE as we will be able to take a national lead).

ACCIDENT HISTORY

5 Over the last five years there has been a steady increase in reportable accidents as shown in the table below using accidents reported to HSE under SIC 61420.

Year	Fatal	Major	3 Day	All	% Increase
96/97	0	28	170	198	-
97/98	0	36	228	264	33.3
98/99	0	53	276	329	24.6
99/00	1	70	532	603	83.3
00/01	1	112	709	822	36.3

6 In the table below are actual incident rates provided by four parcel carriers which shows the wide range of incident rates.

Employee total	Reported accidents	Incident rate
4,500	30	667
1,700	22	1,270
3,200	84	2,625
7,848	282	3,590

7 From the breakdown of last years accident figures manual handling can be clearly identified as a significant accident cause. As workplace transport is also a revitalising topic these figures have also been included for information.

	Fatal	Major	3 Day	All
Handling/strains	0	10	285	295 (35.8%)
Struck by	0	21	115	136 (16.5%)
Transport	1	4	13	18 (2.2%)

BUSINESS PROFILE

8 Before considering the risks associated with manual handling an understanding of the business profile is required. A general parcel carrier may be picking up single parcels of varying weight for delivery to any address. A specialised parcel carrier may collect from only a few consignors but will deliver to any private address (mail order). The carrier could collect only lightweight parcels from offices and deliver to offices (business post). This information will produce a profile of the likely weight range and the frequency of lifting.

9 Consideration should also be given to the function of the premises. This will range from a small local collection/delivery depot up to a national hub. In the later case trailers bring parcels from the local depots which are sorted and reloaded onto the trailer destined for the depot nearest the delivery point for a particular parcel.

10 A local collection/delivery depot may have a large number of vehicles working from it but there may only be one incoming trailer drop per day. Due to the tight turnaround times the most intensive manual handling tasks will be around the loading and unloading of the trailer. This is likely to take place during the night. The parcels are then sorted and loaded onto local delivery vehicles.

11 By contrast at a national hub the manual handling task is the unloading and reloading of trailers to distribute parcels nationally. This makes mechanisation possible but where manual handling does occur it can be very concentrated, eg loose loading (see [para 18](#)).

NATIONAL LIAISON WITH INDUSTRY AND RESULTING GUIDANCE

12 The Utilities National Group (UNG) at Nottingham has regular national discussions with the newly established Parcel Carriers Safety Forum which represents the health and safety interests of the majority of the industry. As a result of this work:

(1) the Forum has produced a publication entitled *Practical Guidance on Manual Handling*. This does not reproduce information already available from HSE sources but is a collection of current best practice in the industry. It is only available as an electronic copy as further sections are likely to be added. This can be downloaded free from their website <http://www.parcelcarriersafetyforum.co.uk/>

(2) HSE has produced a leaflet INDG 348 *Mark a parcel - save a back* requiring consignors to mark the parcel weight to the nearest kilo. As well as assisting the parcel carriers employees this should also be of use to employees of both the consignor and the recipient; and

(3) HSE hosted a national safety event in February 2002 at which both publications were launched together with briefings on the Revitalising of Health & Safety.

GENERIC RISK ASSESSMENTS

13 Given the possible large number of locations visited by parcel carriers, generic risk assessments are appropriate for collection and delivery. The business profile will dictate the number and type of generic risk assessments. These should cover typical locations and loads. For instance one carrier may develop a generic risk assessment for the delivery of a heavy load such as a television set to a private address in a block of flats. Another carrier may frequently collect/deliver parcels in wheeled containers (cages) requiring a manual handling assessment for their use.

14 As with all generic risk assessments the employer must identify situations where the assessment and any measure flowing from it do not apply. Employees will need training in the generic risk assessments in order to be able to draw to their employers attention activities which fall outside the assessment. In such circumstances employers will have to provide a specific risk assessment and associated measures. Employees must have clear instructions from their employers not to attempt to deliver a parcel if it poses a risk to their health and safety. Such instance should be reported to the employer.

15 Within a hub the same tasks are likely to be repeated in each bay, eg unloading a trailer, for which a generic assessment is acceptable provide it covers the full working period. With collection and delivery the body has chance to recover from a lift. In a hub an individual may spend an entire shift working on loose loading with little chance for the muscles to recover. The same provisos contained in para 14 should also be included.

INDUSTRY SPECIFIC GUIDANCE

16 For collection and delivery from consignor to recipient simple measures such as hand trolleys (sack barrows), powered stair climbers and two-person delivery should be capable of dealing with the majority of difficult tasks. The Manual Handling Assessment Tool (see

OM 2001/110) can be used to verify the risk assessment for such simple tasks.

17 Depots will be more mechanised, ranging from fork lift trucks/pallet trucks to computer controlled conveyor systems. Attention needs to be focused on the remaining areas of manual handling which are likely to involve more intense manual effort, eg loose loading, awkward shaped parcels, very heavy items.

18 When parcels are unloaded or stacked into trailers this is referred to as loose loading. One method used to unload the trailer is for one or more employees to lift parcels onto a boom conveyor which progressively extends horizontally into the trailer. This involves lifting from the floor and to well above head height. Employees may spend their entire shift doing this kind of continuous work. However, during loading the frequency of lifting will vary depending on the number of parcels being directed into a particular vehicle. Due to the variation of the lifting pattern it is inappropriate for inspectors to use the Manual Handling Assessment Tool. Therefore HSL has been contracted to carry out a project to assess the long term health effects of such work. One measure is job rotation but there is no guidance available as to the frequency of changes. The work being done by HSL may provide some practical information. Raise and lower platforms are available for use inside trailers which would reduce the problem of removing parcels above head height but this still leaves lifting from the floor. Typically such platforms have been used in taller trailers, eg 3.8 metres internal height.

19 With any vehicle a stacking plan should be adopted to ensure heavy parcels go on the floor and in the case of local delivery vehicles such parcels are kept near the door. Local delivery vans do not usually have tail lifts as parcels weights may be low. At a national hub this is much harder to achieve during the loading of a trailer as parcels are loaded randomly. However, heavy parcels should still be placed on the floor so that they can be removed by sack barrow.

20 The industry is progressively moving to the use of containers. These will be either static containers/pallets loaded by fork lift truck or wheeled containers pushed onto the trailers. With both types of containers the manual handling implications of their use will have to be subject to risk assessment.

21 Loading and unloading will involve bending and reaching. Currently there is little use of raise and lower devices in the industry. There may be instances where these can be used for unloading onto a conveyor system. Loading can involve a sorting ring where containers are positioned in an arc around the end of the conveyor. This should be set up to minimise the distance walked with the most used container nearest the conveyor.

22 The pushing of wheeled containers will require a separate risk assessment. Appendix 2 of *Practical Guidance on Manual Handling* contains ergonomic advice on the design of wheeled containers. Consideration needs to be given to all of the environments in which the wheeled container may be used, from smooth concrete to rough ground. The information is derived from research work carried out by HSL. Employers should therefore be expected to justify their choice of a particular container in relationship to their risk assessment. However, in the case of a franchise operator the containers may be owned by a national company who should provide the appropriate information.

23 Mechanised conveyor systems are ideal for handling box shaped objects. However non standard shapes which cannot be fed via the conveyor system are individually manually handled. The risk assessment should have identified suitable measures for dealing with such parcels, eg sack barrows, pallets, wheeled carts.

24 Air containers are special containers designed to fit inside an aeroplane fuselage. These present both general and manual handling risks which are dealt with in *Practical Guidance on Manual Handling*.

FURTHER INFORMATION

25 UNG is gathering information on mechanical systems/devices which may be able to reduce manual handling in the industry. For further information and/or if you have any examples of good practice not covered in this SIM or the *Practical Guidance on Manual Handling*, please contact the UNG at Nottingham (513 2800).

Date first issued: 17 June 2002

