

Example risk assessment for a motor vehicle repair body shop

Setting the scene

The business employs two sprayers and two other workers who assist with body preparation, panel beating etc. One of these is an apprentice. The premises are on an industrial estate and include an external parking area for four cars, a small reception area and the shop floor. The shop floor consists of the vehicle preparation area which can accommodate three vehicles, a dedicated mixing area for paints and a single downdraught spray booth with 'pit' extraction. The spray booth, local exhaust ventilation and compressor are examined and maintained by the company's insurers. Above the reception there is a mezzanine floor used for storage, which has double handrails and a permanent wooden staircase for access.

A corner of the preparation area has been partitioned off to create a mess room where there is a sink, kettle and microwave. Lockers are provided for storing work clothes and equipment. At the entrance there are toilet facilities with a hand basin, water heater, soap dispenser and paper towels.

The company use an occupational health provider, who visits once a year.

The manager did the risk assessment.

How was the risk assessment done?

The manager first looked at the relevant guidance on the HSE website, including:

- The health and safety toolbox: How to control risks at work (www.hse.gov.uk/toolbox/index.htm)
- Health and safety in motor vehicle repair industry and associated industries (see www.hse.gov.uk/pubns/books/hsg261.htm)
- COSHH essentials sheets for body shops (see www.hse.gov.uk/coshh/index.htm)

He also read the manufacturers' instructions for chemicals and equipment. He then identified the hazards in the repair body shop. He did this by:

- walking around the body shop and noting things that may cause harm
- talking to workers to learn from their knowledge and experience and listen to their concerns and opinions about health and safety issues. He confirmed what training had been provided and asked that they consider particular requirements the young apprentice may need
- looking at the accident book to learn what had previously resulted in accidents or near misses

As he identified the hazards he also thought about who could be harmed and how.

How to use this example

This example risk assessment shows a wide range of hazards that might be present in this type of small business. It can be used as a guide to help you think through some of the hazards in your business and the steps you need to take to control the risks.

However, this is not a generic risk assessment. Every business is different. To satisfy the law you must identify and assess the hazards your business poses, think through the controls required to provide effective protection to people who may be affected by them, and record the significant findings from your risk assessment of your business.

He noted what he was already doing to control the risks and considered whether he needed to do anything more. He then recorded any further actions required.

Putting the risk assessment into practice, the manager set out what actions needed to be taken, who would do them and by when. He placed a copy of the risk assessment at reception where all workers could see it and discussed the findings with them.

The manager decided to review the risk assessment whenever there were any significant changes such as new work equipment, work activities or workers.

Company name: Hope 'n' Spray Bodyshop

Date of risk assessment: 01/05/12

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
Hazardous substances Contact with body-fillers, glues paint thinners and paint	Skin contact can lead to workers getting dermatitis.	<ul style="list-style-type: none"> ■ Low-protein powder-free latex gloves supplied and used ■ Disposable overalls supplied/used ■ Overalls replaced as required ■ Risks from dermatitis explained to workers, and workers trained to spot (and report) any early signs of dermatitis, ie dry, red, itchy skin ■ Workers instructed to wash their hands thoroughly and use skin creams provided after handling substances 	<ul style="list-style-type: none"> ■ Manager to check that gloves are being used 	Manager	03/05/12 then randomly	03/05/12
			<ul style="list-style-type: none"> ■ As no history of dermatitis at company, occupational health provider (OHP) suggested that annual skin check sufficient with skin checks on all new employees 	Manager to arrange with OHP	Each October or if new employee taken on	Copies of health records stored safely
Inhalation of paint mist containing isocyanate	Workers, and any visitors, breathing in the mist may develop asthma.	<ul style="list-style-type: none"> ■ All spraying carried out in spray booth ■ Workers trained in safe use of equipment and safe systems of work ■ Equipment regularly maintained by a competent person and Manager checks this is done and records results ■ Only those with air-fed masks allowed into booth ■ Air-fed masks used by all sprayers and kept in place during 'clearance time' (measured at 1 min 15 sec and marked on outside of booth) ■ Spray booth checked to manufacturer's instructions and tested and examined every 14 months by insurers ■ Breathing air quality from compressor checked every three months by insurers ■ Air-inlet for compressor well clear of any contaminants ■ Spray guns cleaned in ventilated gun cleaner – spray-to-dry in booth wearing air-fed mask 	<ul style="list-style-type: none"> ■ Show sprayers video clips from HSE MVR website showing how they can be exposed to invisible paint mist ■ Ensure workers are exiting the spray booth correctly and only unclipping at exit door 	Manager	30/05/12	30/05/12
			<ul style="list-style-type: none"> ■ Manager check that air-fed masks are used correctly and sprayers don't flip up visor until after the clearance time 	Manager	Random	Note on computer calendar
			<ul style="list-style-type: none"> ■ Booth automatic over-pressure shut down checked every quarter 	Sprayer	Starting 01/06/12	Chart fixed to booth
			<ul style="list-style-type: none"> ■ Biological monitoring (urine tests) and breathing checks (health surveillance) arranged annually for sprayers with occupational health provider to check that controls are working properly and whether there are early signs of asthma ■ Breathing checks to be carried out on all new employees 	Manager to arrange with OHP	Each October or if new employee taken on	Copies of health records stored safely

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
Inhalation of dust from sanding and grinding operations	Sanding/grinding produce large quantities of dust that can damage workers' lungs.	<ul style="list-style-type: none"> ■ On-tool extraction used for power sanding and grinding ■ Disposable dust masks available for hand sanding 	<ul style="list-style-type: none"> ■ Arrange for examination and testing of extraction equipment by insurance company (tie in with booth testing if possible) 	Manager to arrange with Insurers	30/11/12	Records kept in office
Exposure to UV In UV-cured SMART paint system and when arc welding	UV can damage unprotected eyes and skin of workers causing 'arc eye', cataracts and, long term, skin cancer.	<ul style="list-style-type: none"> ■ Coverall, gloves and supplied face shield used ■ Training provided by supplier ■ Welding-type screen encloses operation to protect others 	<ul style="list-style-type: none"> ■ Explain to sprayers that same precautions taken against inhalation of paint mist as for isocyanates 	Manager makes random checks		Note on computer calendar
Fumes from welding and flamecutting	Workers may suffer harm, eg to lungs, from harmful fumes and gases generated during welding including from primer, paint layers.	<ul style="list-style-type: none"> ■ Mobile extraction unit with sufficiently long flexible trunking used ■ Extraction system maintained and tested by insurance company 	<ul style="list-style-type: none"> ■ Check with manufacturer whether further precautions required for ultra high-strength steels 	Manager	31/05/12	28/05/12
Fire Faulty electrics, arson	If trapped workers and customers could suffer fatal injuries from smoke inhalation/burns.	<ul style="list-style-type: none"> ■ Fire risk assessment done and any necessary action taken, see www.gov.uk/workplace-fire-safety-your-responsibilities. 	<ul style="list-style-type: none"> ■ No further action 			
Fuel	Workers could suffer severe or fatal burns if petrol gets on them and is ignited.	<ul style="list-style-type: none"> ■ Proprietary fuel-retriever used in open air ■ Hot work on any fuel tank (including diesel) prohibited unless inerted ■ LPG fuelled vehicles subcontracted to specialist refinisher 	<ul style="list-style-type: none"> ■ Provide employees with information from <i>Safe use of petrol in garages</i> (INDG331) and <i>Vehicle Finishing Units – Risks from Gross Leakage of Fuels and Hot work on small tanks and drums</i> (INDG314) 	Manager	31/05/12	28/05/12
Paint and thinners	Paint thinners are highly flammable (as for petrol above) and paint mist can cause fire or explosions.	<ul style="list-style-type: none"> ■ Less than 50 litres of solvent kept in metal bin inside workshop. Larger quantities kept in the locked and ventilated fire-resisting store in the yard ■ Paint mixing unit is fire-resistant and well ventilated ■ All electrical equipment within 1 m of mixer is correctly Ex rated ■ Metal bin with tight fitting lid used for waste rags ■ Only Ex rated equipment allowed in spray booth ■ No hot work or sparks near fuel or solvent 	<ul style="list-style-type: none"> ■ No further action 			

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Noise Working with angle grinders	Workers/contractors may suffer discomfort and potential hearing damage if working in noisy areas or using noisy equipment.	<ul style="list-style-type: none"> ■ Purchasing policy to replace tools with quietest option ■ Noisy work restricted to 'ear protection zone' to reduce the numbers at risk ■ Suitable hearing protectors provided for workers and workers trained how to use, check and maintain them according to advice given by supplier ■ Workers trained in risk of noise exposure 	<ul style="list-style-type: none"> ■ Workers to be shown HSE's webpages on noise (www.hse.gov.uk/noise/index.htm) 	Manager	31/05/12	28/05/12
			<ul style="list-style-type: none"> ■ Seek opinion of OHP whether health checks required 	Manager	October	October
Vibration	Workers may suffer vibration white finger (hand-arm vibration – HAV) from over use of power tools (eg sanders, grinders and disc cutters).	<ul style="list-style-type: none"> ■ Purchasing policy to have tools that have been designed and constructed to reduce the risk of vibration, and are suitable for their intended use ■ Workers trained to use them safely and keep them properly maintained 	<ul style="list-style-type: none"> ■ Workers who use vibrating tools to be shown HSE's vibration webpages (www.hse.gov.uk/vibration/hav/index.htm) 	Manager	31/05/12	28/05/12
			<ul style="list-style-type: none"> ■ Seek opinion of OHP whether health checks required 	Manager	October	October
Electrical Portable appliances, eg hand lamps	Workers could get electrical shocks or burns from using faulty electrical equipment, or a faulty installation. Electrical faults can also cause fires.	<ul style="list-style-type: none"> ■ Low-voltage hand lamps (24 V) used ■ Residual current device (RCD) built into main switchboard ■ Workers trained to spot and report any defective plugs, damaged cables or discoloured sockets to manager ■ Annual testing on all portable 240 V tools ■ Safety checks of the electrical equipment and installations are carried out to ensure that the equipment continues to be safe. Where necessary this is done by a competent electrician 	<ul style="list-style-type: none"> ■ Manager to assess suitability of replacing 240 V tools with air-powered or 110 V alternatives 		01/10/12	
Machinery Grinding equipment	Workers/contractors may suffer serious injury from unguarded moving parts of machinery.	<ul style="list-style-type: none"> ■ Pre-use checks on all mechanical equipment, faults reported to manager ■ Equipment not left running unattended ■ Equipment guarded to manufacturers' standards ■ Safety goggles provided and worn ■ Only trained persons use/change grinding wheels 	<ul style="list-style-type: none"> ■ No further action 			

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Failure of car lift or car jack	Workers may suffer severe crush injuries from falling vehicle if a car lift or jack fails.	<ul style="list-style-type: none"> ■ Car lifts/jacks serviced by supplier and examined every six months by insurers ■ Jacks only used where ground conditions are firm, stable and level. Once vehicle lifted, axle stands used ■ Axle stands maintained and inspected and damaged stands taken out of use ■ Safe working loads not exceeded 	<ul style="list-style-type: none"> ■ No further action 			
Compressed air Explosion of equipment, eg tyres	Workers could suffer blast injuries, eg if tyre exploded or internal damage if compressed air is introduced into the body.	<ul style="list-style-type: none"> ■ All workers trained in safe working procedures and dangers of horseplay ■ Airline has dead man's handle ■ System serviced every year and thoroughly examined by insurers in accordance with the written scheme of examination 	<ul style="list-style-type: none"> ■ No further action 			
Manual handling Movement of spare parts or components	Workers risk injuries or back pain from handling of heavy/bulky objects	<ul style="list-style-type: none"> ■ Workers are instructed to use porter's trolley to move heavier materials, parts etc 	<ul style="list-style-type: none"> ■ OHP to discuss manual handling techniques with workers ■ Manager to check that workers know how to lift safely and handle tyres in accordance with Collection and delivery of tyres 	Manager	October	October
Handling vehicle air bags	Air bags could explode when not fitted, causing injury to workers.	<ul style="list-style-type: none"> ■ Workers trained in correct handling and fitting ■ Faulty units returned to supplier for disposal 	<ul style="list-style-type: none"> ■ No further action 			
Work involving air conditioning systems	Workers could suffer: <ul style="list-style-type: none"> ■ frostbite – through skin or eye contact with refrigerant liquid or gas ■ asphyxiation – if sufficient quantities of gas escape into confined space ■ exposure to harmful gases – through thermal decomposition of refrigerant if exposed to a naked flame. 	<ul style="list-style-type: none"> ■ Workers are trained in correct procedures 	<ul style="list-style-type: none"> ■ Brief workers on safe working with air-conditioning systems (from HSE's <i>Safe working with vehicle air conditioning systems</i> INDG349) 	Manager	31/05/12	31/05/12

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
Vehicle movements	Workers and customers might suffer serious injury if struck by a vehicle (including a vehicle parked unbraked and/or unchocked and in gear, and then started up from outside the vehicle).	<ul style="list-style-type: none"> ■ Safe parking provided for customers ■ Marked walkways for pedestrians ■ Parked vehicles are braked or chocked when on vehicle lifts, jacks or axle stands, or sloping ground ■ Engines always started and run with brakes on and in neutral gear, and by someone sitting in the driver's seat 	<ul style="list-style-type: none"> ■ No further action 			
Slips and trips Doorways (rain), spillages, uneven surfaces	Workers and customers may be injured if they trip over objects or slip on spillages.	<ul style="list-style-type: none"> ■ Good housekeeping standards maintained through training and monitoring ■ Workers clean up spillages immediately ■ Good lighting in all areas 	<ul style="list-style-type: none"> ■ Weekly housekeeping check to be started 	Manager to do random checks		
Working at height	Falls from any height can cause bruising and fractures and potentially serious injuries.	<ul style="list-style-type: none"> ■ Handrails fitted at edges of raised storage areas and access stairway provided ■ Workers are competent to use ladders where appropriate 	<ul style="list-style-type: none"> ■ Manager to monitor use of ladders and access equipment when working on vehicles 	Manager	Random	Note on computer calendar
Public access to workshop	Customers might be injured if they enter the workshop.	<ul style="list-style-type: none"> ■ Authorised Persons sign on display banning customers from the workshop, a viewing window is provided in reception ■ If customers do need to enter workshop they must be escorted by a worker 	<ul style="list-style-type: none"> ■ Workers to be reminded to challenge anyone entering the workshop without permission 	Manager		

Assessment review date: 01/05/13