

# Example risk assessment for a motor vehicle repair body shop

## Setting the scene

The business employs two sprayers and two others who assist with body preparation, panel beating etc, one of whom 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 shopfloor. This consists of the vehicle preparation area, which can accommodate three vehicles; a dedicated mixing area for paints; and a single draught spray booth with 'pit' extraction. The company have recently invested in a new UV-cured Small to Medium Area Repair Technique (SMART) system. The spray booth, local exhaust ventilation and compressor are examined and maintained by the company's insurers. Above the

### Important reminder

**This example risk assessment shows the kind of approach a small business might take. Use it as a guide to think through some of the hazards in your business and the steps you need to take to control the risks. Please note that it is not a generic risk assessment that you can just put your company name on and adopt wholesale without any thought. This would not satisfy the law – and would not be effective in protecting people.**

**Every business is different – you need to think through the hazards and controls required in your business for yourself.**

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.

## How was the risk assessment done?

The manager followed the guidance in *Five steps to risk assessment* ([www.hse.gov.uk/pubns/indg163.pdf](http://www.hse.gov.uk/pubns/indg163.pdf)).

1 To identify the hazards, the workshop manager:

- read HSE's motor vehicle repair web pages ([www.hse.gov.uk/mvr](http://www.hse.gov.uk/mvr)) – particularly the ten myths related to isocyanate paint spraying, HSG67 *Health and safety in motor vehicle repair* ([www.hsebooks.com](http://www.hsebooks.com)); and the free leaflet *An introduction to health and safety* ([www.hse.gov.uk/pubns/indg259.pdf](http://www.hse.gov.uk/pubns/indg259.pdf)) to make sure he hadn't missed any hazards;
- checked the manufacturers' instructions or data sheets for chemicals and equipment and downloaded the COSHH essential sheets ([www.coshh-essentials.org.uk](http://www.coshh-essentials.org.uk)) relating to bodyshops;
- walked around the body shop, noting things that he

thought might pose a risk and taking the information in HSE's guidance into consideration;

- talked to staff to listen to their concerns about health and safety and how risks can best be controlled, to confirm what training they had been given, and to consider any particular requirements that the young apprentice may have; and
  - looked in the accident book, to understand what problems have occurred in the past.
- 2 The manager then wrote down who could be harmed by the hazards and how.
  - 3 For each hazard identified, the manager recorded what controls, if any, were in place to manage these. He then compared these controls to the HSE guidance. Where existing controls did not meet good practice, the manager wrote down what further actions were needed to manage the risk.
  - 4 The manager put the findings of the risk assessment into practice. He then decided and recorded who was responsible for implementing the further actions and when they should be done. When each action was completed it was ticked off and the date recorded. He made the risk assessment part of the induction process for new staff.
  - 5 The findings of the risk assessment were discussed with the sprayers and other staff. The manager decided that a review and update of the risk assessment would be made annually or sooner if things changed.

Company name: Hope 'n' Spray Bodyshop Date of risk assessment: 2/2/08

What are the hazards?	Who might be harmed and how?	What are you already doing?	What further action is necessary?	Action by whom?	Action by when?	Done
<b>Hazardous substances</b>  Contact with body-fillers, glues paint thinners and paint	Skin contact can lead to workers getting dermatitis.	<ul style="list-style-type: none"> <li>■ Low-protein powder-free latex gloves supplied and used.</li> <li>■ Disposable overalls supplied/used.</li> <li>■ Overalls replaced as required.</li> <li>■ Risks from dermatitis explained to workers, and workers trained to spot (and report) any early signs of dermatitis, ie dry, red, itchy skin.</li> </ul>	<ul style="list-style-type: none"> <li>■ Manager to check that gloves are being used.</li> </ul>	Manager	8/3/08 then randomly	8/3/08
			<ul style="list-style-type: none"> <li>■ As no history of dermatitis at company, occupational health provider (OHP) suggested that annual skin check sufficient with skin checks on all new employees.</li> </ul>	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"> <li>■ All spraying carried out in spray booth.</li> <li>■ Workers trained in safe use of equipment and safe systems of work.</li> <li>■ Equipment regularly maintained by a competent person and Manager checks this is done and records results.</li> <li>■ Only those with air-fed masks allowed into booth.</li> <li>■ 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).</li> <li>■ Spray booth checked to manufacturer's instructions and tested and examined every year by insurers.</li> <li>■ Breathing air quality from compressor checked every 3 months by insurers.</li> <li>■ Air-inlet for compressor well clear of any contaminants.</li> <li>■ Sprayguns cleaned in ventilated gun cleaner – spray-to-dry in booth wearing air-fed mask.</li> </ul>	<ul style="list-style-type: none"> <li>■ Show sprayers video clips from HSE MVR website showing how they can be exposed to invisible paint mist.</li> </ul>	Manager	30/4/08	28/4/08
			<ul style="list-style-type: none"> <li>■ Manager check that air-fed masks are used correctly and sprayers don't flip up visor until after the clearance time.</li> </ul>	Manager	Random	Note on computer calendar
			<ul style="list-style-type: none"> <li>■ Booth automatic over-pressure shut down checked every quarter.</li> </ul>	Sprayer	Starting 1/4/08	Chart fixed to booth
			<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ Breathing checks to be carried out on all new employees</li> </ul>	Manager to arrange with OHP	Each October or if new employee taken on	Copies of health records stored safely

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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"> <li>■ On-tool extraction used for power sanding and grinding.</li> <li>■ Disposable dust masks available for hand sanding.</li> </ul>	<ul style="list-style-type: none"> <li>■ Arrange for examination and testing of extraction equipment every year by insurance company (tie in with booth testing if possible)</li> </ul>	Manager to arrange with Insurers	30/11/08	Records kept in office
Exposure to UV in UV-cured SMART paint system and 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"> <li>■ Coverall, gloves and supplied face shield used.</li> <li>■ Training provided by supplier.</li> <li>■ Welding-type screen encloses operation to protect others.</li> </ul>	<ul style="list-style-type: none"> <li>■ Explain to sprayers that same precautions taken against inhalation of paint mist as for isocyanates</li> </ul>	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, underseal etc	<ul style="list-style-type: none"> <li>■ Mobile extraction unit with sufficiently long flexible trunking used.</li> <li>■ Extraction system maintained and tested annually by IC.</li> </ul>	<ul style="list-style-type: none"> <li>■ Check with manufacturer whether further precautions required for ultra high-strength steels</li> </ul>	Manager	31/3/08	28/4/08
<b>Fire</b> General	Workers/others may suffer serious or fatal injuries from burns and/or smoke inhalation if trapped.	<ul style="list-style-type: none"> <li>■ Fire risk assessment undertaken as required by law, see <a href="http://www.fire.gov.uk/workplace+safety">www.fire.gov.uk/workplace+safety</a></li> </ul>	<ul style="list-style-type: none"> <li>■ Continue to ensure that actions identified as necessary by the fire risk assessment are carried out.</li> </ul>	Manager		
Fuel	Workers could suffer severe or fatal burns if petrol gets on them and is ignited	<ul style="list-style-type: none"> <li>■ Fuel tanks reasonably empty (preferably around a quarter full) and fuel cap removed before baking.</li> <li>■ Proprietary fuel-retriever used in open air.</li> <li>■ Hot work on any fuel tank (ie including diesel) prohibited unless inerted.</li> <li>■ LPG fuelled vehicles subcontracted to specialist refinisher.</li> </ul>	<ul style="list-style-type: none"> <li>■ Provide employees with information from INDG331 <i>Safe use of petrol in garages; Vehicle Finishing Units – Risks from Gross Leakage of Fuels</i>; and INDG314 <i>Hot work on small tanks and drums</i></li> </ul>	Manager	31/3/08	28/3/08

What are the hazards?	Who might be harmed and how?	What are you already doing?	What further action is necessary?	Action by whom?	Action by when?	Done
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"> <li>■ 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.</li> <li>■ Paint mixing unit is fire-resistant and well ventilated.</li> <li>■ All electrical equipment within 1 m of mixer is correctly Ex rated.</li> <li>■ Metal bin with tight fitting lid used for waste rags.</li> <li>■ Only Ex rated equipment allowed in spray booth.</li> <li>■ No hot work or sparks near fuel or solvent.</li> </ul>		Manager to speak to disposal company	31/5/08	31/5/08
<b>Noise</b>	Staff and others may suffer hearing damage from exposure to noise from pneumatic tools and metal cutting equipment, eg angle grinder.	<ul style="list-style-type: none"> <li>■ Purchasing policy to replace tools with quietest option.</li> <li>■ Noisy work restricted to 'ear protection zone' to reduce the numbers at risk.</li> <li>■ Suitable hearing protectors provided for staff and staff trained how to use, check and maintain them according to advice given by supplier.</li> <li>■ Staff trained in risk of noise exposure.</li> </ul>	<ul style="list-style-type: none"> <li>■ Workers to be shown HSE's Noise webpages (<a href="http://www.hse.gov.uk/noise/index.htm">www.hse.gov.uk/noise/index.htm</a>)</li> </ul>	Manager	31/3/08	28/3/08
			<ul style="list-style-type: none"> <li>■ Seek opinion of OHP whether health checks required.</li> </ul>	Manager	October	October
<b>Vibration</b>	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"> <li>■ Purchasing policy to have tools that have been designed and constructed to reduce the risk of vibration, and are suitable for their intended use.</li> <li>■ Workers trained to use them safely and keep them properly maintained.</li> </ul>	<ul style="list-style-type: none"> <li>■ Workers who use vibrating tools to be shown HSE's Vibration webpages (<a href="http://www.hse.gov.uk/vibration/hav/index.htm">www.hse.gov.uk/vibration/hav/index.htm</a>)</li> </ul>	Manager	31/3/08	28/3/08
			<ul style="list-style-type: none"> <li>■ Seek opinion of OHP whether health checks required.</li> </ul>	Manager	October	October
<b>Electrical</b>	Staff 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"> <li>■ Low-voltage hand lamps (24 v) used.</li> <li>■ Residual current device (RCD) built into main switchboard.</li> <li>■ Staff trained to spot and report any defective plugs, damaged cables or discoloured sockets to manager.</li> <li>■ Annual testing on all portable 240 v tools.</li> <li>■ Installation regularly maintained to a planned schedule.</li> </ul>	<ul style="list-style-type: none"> <li>■ Manager to assess suitability of replacing 240 v tools with air-powered or 110 v alternatives.</li> </ul>		1/8/08	

What are the hazards?	Who might be harmed and how?	What are you already doing?	What further action is necessary?	Action by whom?	Action by when?	Done
<b>Machinery</b> Eg grinding equipment	Workers might suffer trap or cut injuries from contact with moving parts, or burn injuries. Also, particles can be ejected into the eyes.	<ul style="list-style-type: none"> <li>■ Pre-use checks on all mechanical equipment, faults reported to manager.</li> <li>■ Equipment not left running unattended.</li> <li>■ Equipment guarded to manufacturers' standards.</li> <li>■ Safety goggles provided and worn.</li> <li>■ Only trained persons use/change grinding wheels.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required</li> </ul>			
<b>Failure of car lift or car jack</b>	Workers may suffer severe crush injuries from falling vehicle if a car lift or jack fails.	<ul style="list-style-type: none"> <li>■ Car lifts/jacks serviced by supplier and examined every 6 months by insurers.</li> <li>■ Axle stands maintained and inspected and damaged stands taken out of use.</li> <li>■ Axle stands used after lifting vehicle with jack.</li> <li>■ Safe working loads not exceeded.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required</li> </ul>			
<b>Compressed air</b> Explosion of equipment, eg tyres  Injection of air in the body	Staff could suffer blast injuries if the air receiver exploded; or internal damage if compressed air is introduced into the body.	<ul style="list-style-type: none"> <li>■ All employees trained in safe working procedures and dangers of horseplay.</li> <li>■ Air line has deadman's handle.</li> <li>■ System serviced every year and thoroughly examined by insurers in accordance to the Written Scheme.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required</li> </ul>			
<b>Manual handling</b> In the store; movement of components	All employees could suffer from back pain if regularly lifting/carrying heavy or awkward objects.	<ul style="list-style-type: none"> <li>■ Staff instructed to use porter's trolley to move heavier materials, parts etc.</li> </ul>	<ul style="list-style-type: none"> <li>■ OHP to discuss manual handling techniques with staff. Manager to check that workers know how to lift safely and handle tyres in accordance with <i>Collection and delivery of tyres</i>.</li> </ul>		October	October
<b>Handling vehicle air bags</b>	Air bags could explode when not fitted, causing injury to workers.	<ul style="list-style-type: none"> <li>■ Units stored in their own, suitable cabinet.</li> <li>■ Workers trained in correct handling and fitting.</li> <li>■ Faulty units returned to supplier for disposal</li> </ul>	<ul style="list-style-type: none"> <li>■ Pin up poster <i>INDG280 A guide to handling and storage of airbags and seatbelt pretensioners at garages and motor vehicle repair shops</i> in mess room.</li> </ul>	Manager	31/3/08	28/3/08

What are the hazards?	Who might be harmed and how?	What are you already doing?	What further action is necessary?	Action by whom?	Action by when?	Done
<b>Work involving air conditioning systems</b>	Workers might be asphyxiated by gas release in confined space or get frostbite from skin or eye contact with refrigerant. Naked flames can cause refrigerant to decompose, creating harmful gases.	<ul style="list-style-type: none"> <li>Workers are trained in correct procedures and certified to EC Minimum Qualifications.</li> </ul>	<ul style="list-style-type: none"> <li>Pin up poster in mess room of INDG349 <i>Safe working with vehicle air-conditioning systems</i> (but noting that it refers to R12, a CFC which is now banned).</li> </ul>	Manager	31/3/08	28/3/08
<b>Vehicle movements</b>	Workers/others might suffer serious injury, eg fractures, if struck by a vehicle (including being struck by a vehicle parked unbraked and/or unchocked and in gear, and then started up from outside the vehicle).	<ul style="list-style-type: none"> <li>Safe parking provided for customers.</li> <li>Marked walkways for pedestrians.</li> <li>Vehicles driven slowly in/out and around premises.</li> <li>Parked vehicles are braked or chocked when on vehicle lifts, jacks or axle stands, or sloping ground.</li> <li>Engines always started and run with brakes on and in neutral gear, and by someone sitting in the driver's seat.</li> </ul>	<ul style="list-style-type: none"> <li>Manager to monitor speed of cars in/out and around premises.</li> </ul>			
<b>Slips and trips</b>	Workers/others may suffer bruising or fractures from slipping on spillages.	<ul style="list-style-type: none"> <li>Generally good housekeeping standards maintained.</li> <li>Staff 'clean as they go', eg clear up spillages immediately.</li> </ul>	<ul style="list-style-type: none"> <li>Weekly housekeeping check to be started.</li> </ul>			
<b>Falls from height</b>	Workers might get Injuries such as fractures if they fall from steps/ladders, top of vehicles etc.	<ul style="list-style-type: none"> <li>Handrails fitted at edges of raised storage areas and access stairway provided.</li> <li>Employees trained to use steps/ladders safely.</li> </ul>	<ul style="list-style-type: none"> <li>Manager to monitor use of portable steps/ladders, access equipment when working on vehicles.</li> </ul>		Random	Note on computer calendar
<b>Public access to workshop</b>	Customers might be injured if they enter the workshop.	<ul style="list-style-type: none"> <li>Signs up banning customers from the workshop, viewing window provided in reception.</li> <li>If customers need to enter workshop they must be escorted by a staff member.</li> </ul>	<ul style="list-style-type: none"> <li>Staff to be reminded to challenge anyone entering the workshop without permission.</li> </ul>			

**Assessment review date: 1/10/09**