

# THE TOP TEN STEPS...

*to a safer more profitable shop*

## Occupational Health and Safety Policy

Develop and implement a policy



## Respiratory Protection

Wear approved respiratory protection



## Flammable Liquids

Safe handling, storage and disposal



## Safe Work Environment Practices

Prevent injuries. Identify and correct poor work practices



## Personal Protective Equipment

Protect yourself, wear it!



## Fire Safety

Reduce risks with appropriate equipment and a fire safety plan



## Electrical Safety

Make sure equipment complies with provincial code



## Housekeeping

A clean shop reduces slips, trips and falls



## Protect Your Environment

Increase profitability by reducing, re-using and recycling



## WHMIS Compliance

Includes:  
- current MSDS  
- labels  
- training



For more information, please consult the "Top Ten Steps" book.

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# PREFACE

The Automotive Collision Repair Industry faces many challenges in the health, safety, and environmental area. Two of the key issues are to ensure that workers remain healthy and safe and that the environment is protected.

A collision repair facility will experience many benefits from having a strong health, safety, and environmental program including:

- Productivity will increase with a work force that is free of occupational injuries or illnesses.
- Profitability will increase with less waste and less time away from work.
- Management's legal responsibilities and due diligence under provincial regulations will be met, reducing the risk of possible fines from workplace inspections.
- The risk of a business closure, loss, or disruption will be significantly reduced.
- The image of the collision repair facility will be enhanced, giving its owner a competitive edge over the competition.

The following booklet and accompanying poster summarize the Top Ten Steps to a safer, more profitable auto body shop.

## Acknowledgements

The Automotive Industries Association of Canada (AIA)'s Top Ten booklet and poster has been prepared by the members of the Safety, Health, and Environment Committee of the Paint and Body Equipment (PBE) Council.

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Keith Burns, PPG Canada Inc.

Dan Curts, 3M Canada

Ken Hine, Hine Associates Consulting

John Norris, HARA

Paul Madonia, Uni-Select

Norm Rose, Caruk & Associates

Rick Valin, ART

The assistance of Carla Salvador, Ontario Service Safety Alliance, in preparing the booklet is gratefully acknowledged.

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# RESPIRATORY PROTECTION FOR COLLISION REPAIR FACILITIES



Most manufacturers of products used in the collision repair industry strongly recommend that approved respiratory protection should be selected and used to eliminate and/or minimize the risk of excessive exposure to employees from occupational dusts, welding fumes, mists, gases, smoke, sprays, vapours and other hazardous substances, such as isocyanates and organic solvents.

## What You Can Do

### Preparation

- Read labels on hazardous materials and material safety data sheets (MSDS), to determine the respiratory protection required for your particular situation.
- All shop employees should be medically fit, have medical approval, be fit tested and trained, if they regularly use a respirator in hazardous conditions.
- Perform a “user-seal” check on respiratory protection equipment (negative and positive pressure test) before each use.
- Inspect the respirator before each use to ensure it is clean and all the components are present and work properly.

### Use

- When using a respirator, if you detect an odour or taste, or feel eye or throat irritation, or experience any breathing impairments, leave the hazardous environment immediately.

### Maintenance

- Be sure your respirator is cleaned and sanitized thoroughly according to manufacturer’s instructions and stored it safely.

### And Remember

- Do not use air-purifying respirators in oxygen-deficient atmospheres or use respirators to protect against contaminants for which they were not designed.



## Did You Know?

In many situations, employers are legally required to:

- Provide respiratory protection and the training to understand the equipment's limits, to use it effectively and safely, and to clean, inspect and store it properly.
- Ensure that employees use, maintain and store respiratory equipment properly.
- Respirators should be properly selected and fitted before use.
- Facial hair and other conditions of the face may render certain types of (negative pressure) respirators ineffective.
- Employees with some medical or psychological conditions should use respirators only with their Doctor's permission.
- Excessive exposure to dust, sunlight, extreme temperature, excessive moisture or damaging chemicals may reduce the life and effectiveness of respirators.
- Records of the respiratory protection program must be kept, including medical assessments, fit tests, issuance, repairs, replacements, training, etc.

# FLAMMABLE LIQUIDS FOR COLLISION REPAIR FACILITIES



## What Can Happen

Explosion, fire, total property loss, burns, smoke inhalation, lung damage, poisoning, critical injuries, death.

## What You Can Do

### Storage

- Handle and store containers of flammable liquids according to local codes and keep storage areas clean and free of obstructions.
- Inspect all containers for damage and proper labeling, and clearly label all containers you fill.
- Keep containers closed when they are not in use and post signs warning about the presence of stored flammable liquids.

### Preparation

- Read the label and check the material safety data sheet (MSDS) before using a flammable liquid.
- Use personal protective equipment whenever handling, dispensing, using, disposing of or cleaning up spills of flammable liquids, i.e. neoprene gloves, respirator, face shield
- Use explosion-proof equipment wherever flammable liquids or vapours and static charges or sources of ignition are or may be present.
- Make sure that metal containers are bonded and grounded properly to eliminate static electricity when dispensing flammable liquids – some plastic containers can also generate static electricity.

### Use

- Use extreme caution when dispensing flammable liquids.
- Use the proper material handling equipment and clean up spills immediately.



### After Using Flammable Liquids

- Store waste materials the same way as unused materials.
- Dispose of waste flammable liquids according to environmental laws and regulations.

## In Case of an Emergency

- Plan, train and practice for emergencies.
- Inspect and maintain fire suppression equipment.
- Be aware of your workplace's emergency evacuation plan and practice it to make sure everybody knows what to do.

### And Remember

- **Do not** use water to fight flammable liquid fires because it spreads the fire instead of controlling it – employees expected to use fire extinguishers must be trained to select and use them properly.

## Did You Know?

- Flammable liquids must be stored according to fire and electrical codes.
- A well-designed and maintained ventilation system will remove flammable vapours from the workplace and reduce the risk of fire and explosion.
- Flammable liquids can also be highly toxic and reactive.
- Your local fire department may be a resource in planning for emergencies.
- Vapours may travel considerable distances and settle in low lying areas –if there is a source of ignition, they can be ignited and flash back to an open or leaking container.
- Flammable fluids (e.g., thinners, solvents and fuels) that accumulate static charges when they are flowing or agitated could be ignited by a static charge and cause a fire or explosion.

# PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR COLLISION REPAIR FACILITIES



Personal protective equipment (PPE) protects you from hazards. Everyone must wear PPE when required by provincial regulations or your employer. PPE refers to safety glasses, goggles or face shields, masks, respirators, hearing protection, steel-toed boots and non-slip footwear, solvent resistant gloves, aprons, hard hats or bump caps, coveralls or any other special clothing.

## What You Can Do

### Before Use

- Make sure you know how to use your personal protective equipment correctly – if you are not sure, ask your supervisor.
- Make certain that the PPE used is specified correctly for the task.
- Wear hearing protection such as ear plugs or muffs when using air tools.
- Wear eye protection such as safety glasses, goggles, or face shields when using air tools, grinders, wire brushes, or when using flammable or corrosive materials.
- Wear acid-proof gloves and apron when dealing with batteries, especially older ones, which are more likely to leak.
- Wear steel-toed slip-resistant shoes when in the shop.
- Make sure that your mask or respirator is the proper one for the job you are doing and in good condition. Wear full face mask with fresh air supply when spraying paint.

### After Use

- All defective personal protective equipment must be reported immediately.
- Keep the personal protective equipment you use clean, well maintained and stored safely.

## Did You Know?

- Employers are responsible for identifying the hazards in the workplace, putting up signs where personal protective equipment is to be worn and making sure employees always use the equipment.
- Employers must make sure that employees are trained in how to use the right equipment, materials and personal protective equipment for the job.
- Employers are responsible for making sure all personal protective equipment is in good working condition.

# ELECTRICAL SAFETY FOR COLLISION REPAIR FACILITIES



## What Can Happen

Fires, explosions, property loss, fines, burns, shock, death.

## What You Can Do

### Preparation

- Use CSA or Underwriters Laboratories (UL) approved equipment and, where appropriate, chose explosion proof electrical systems.
- Ensure all electrical wires are in good order and all plugs have a functioning third prong.
- Be aware of any sources of flammable vapours near sources of ignition.
- Read the operator's manual before using any electrical equipment.
- Inspect all electrical outlets and equipment for damage before use.
- Ensure electrical rooms are locked and doors are clearly labeled.

### Use

- Use Teflon-coated trouble lights when working with flammable liquids or near sources of heat.
- Do not use electrical equipment that is creating a "shock".
- Always unplug and plug in electrical equipment by the plug, not the cord.
- Use electrical devices only as they were designed.
- Use extension cords only if they are appropriate for the task and in good repair.

### Maintenance

- Store electrical equipment so that the cord does not become damaged.
- Lockout and tag out all electrical sources before cleaning or repairing equipment.

### And Remember

- **Do not** store, work with or dispose of flammable liquids near sources of ignition, including electrical panels and light switches.
- **Do not** use a "cheater" plug (a device that allows you to put a three-prong plug into a two-prong outlet).



- **Do not** use electrical rooms for storage.
- **Do not** store metal near electrical panels.

## Did You Know?

- Any person who repairs electrical equipment should be specially trained and qualified.
- Employers should ensure employees are fully trained in the use of any equipment before using it for the first time.

# WHMIS COMPLIANCE FOR COLLISION

## WHMIS COMPLIANCE



Exposure to hazardous materials through improper storage or handling in the workplace can result in fires, explosions, injury and illness including burns, poisoning, asphyxiation, reproductive disorders and cancer, or death. The effects can be immediate or long-term. Some hazardous products have a “latency” period, and serious diseases such as cancer may not appear for 20 years or more after exposure.

## What You Can Do

### Knowing about WHMIS

- Make sure you know about the Workplace Hazardous Materials Information System (WHMIS), which involves:
  - hazard symbols
  - supplier and workplace labels
  - MSDSs (material safety data sheets) not older than 3 years
  - workplace training
- Be aware of the hazardous materials in the workplace – they are numerous in collision repair facilities.
- If you have a question or concern, talk to your supervisor, your joint health and safety committee or your worker health and safety representative for more information about the specific rights and responsibilities of suppliers, employers and workers under WHMIS.

### How WHMIS Works

- Make sure you can recognize the 8 WHMIS hazard symbols.
- Make sure warning labels that provide basic health and safety information about hazardous materials are placed on containers – there are supplier and workplace labels.
- Know the location of MSDSs for each hazardous material used in the workplace.
- Training is required on how to use this information.

## Did You Know?

- WHMIS is a Canada-wide system to provide employers and workers with the information they need to work safely with hazardous materials – it is also called the “Right to Know” legislation.
- Failure to comply with the legislation is punishable by fines and imprisonment.
- Employers are legally required to provide WHMIS training for every worker at orientation and whenever new hazardous materials are introduced into the workplace.

# PROTECT YOUR ENVIRONMENT



## What Can Happen

Waste management can have a positive effect on your bottom line, on how you do business and on the future you are creating for your children. You can lower your disposal costs, decrease material costs and increase your profitability while having a positive effect on the environment.

## What You Can Do

### Preparing a waste management program

- Assess what you can do.
- Develop a plan and prioritize your actions.
- Implement the plan.

### Practical Waste Management Practices

- Use 'smart scales' for mixing paint and HVLP guns for spraying.
- Reclaim and reuse used thinners and solvents.
- Segregate wastes.
- Recycle rags and linen.
- Substitute non-hazardous products for hazardous products.
- Maintain an inventory control program.

## Did You Know?

- You may be able to reduce the costs of recycling:
  - your local municipality may help you develop a waste reduction plan or alternatives.
  - some waste disposal companies will pick up some types of waste at no charge.
  - your disposal company may help you implement the "right" service that suits your needs – shop around.
- Waste disposal costs continue to increase because of high transportation costs and lack of landfill space.
- Careless disposal can cause serious damage to the environment and your business.
- You might be able to recover costs via an environmental charge on your invoice.

# FIRE SAFETY FOR COLLISION REPAIR FACILITIES



## What Can Happen

Fire, explosions, business loss, lawsuits, burns, serious injury from explosion, death.

## What You Can Do to Prevent a Fire

### Storage

- Store flammable materials in approved safety cans and in properly ventilated storage areas or cabinets, away from electrical sources, sparks, and other sources of ignition.
- Store flammable materials away from oxidizing materials such as body filler hardeners.
- Store used rags and flammable wastes in proper containers .

### Routinely

- Smoke only in designated areas.
- Report all fire hazards to your supervisor promptly.
- Make sure that ventilation systems are working properly and are serviced and maintained regularly.
- Bond and ground containers when transferring flammable and combustible liquids to portable containers, and inspect bonding and grounding assemblies before using them.
- Read labels and MSDSs (material safety data sheets) before using hazardous materials.
- Change your clothing immediately if you are splashed with flammable liquid.
- Be familiar with emergency procedures.

### During a Fire

- Know and be ready to follow your emergency evacuation procedure – the fire safety plan must be documented, posted and communicated to all employees.
- Clearly identify and know the location of fire alarms, fire extinguishers and emergency exits.
- Fight a fire only if you are trained and it is safe to do so.
- Know your limitations and always think of your personal safety first.



## Did You Know?

- Employers must have proper fire exits, fire fighting equipment and emergency plans.
- Employers must provide proper inspection and maintenance of fire prevention and fighting equipment.
- All emergency exits must be free from obstructions, be unlocked when employees are in the building and have clearly lighted signs.
- Regular fire drills must be conducted so you know what to do in case of fire.
- Using proper housekeeping and following standard procedures can greatly reduce the potential of fire.
- Toxic and irritating gases may be generated during a fire.

# HOUSEKEEPING AT COLLISION REPAIR FACILITIES



Housekeeping is essential for health and safety in collision repair and vehicle refinish workplaces. Good housekeeping practices not only remove hazards from your work area but can also save you substantial time and money. A clean, well organized workplace can substantially improve the image of your business and make you more money.

## What You Can Do

### Before Work

- Start each day with a clean work area.

### While Working

- Keep benches clear of all objects you are not using for the job you are doing – this prevents spills or falling objects and saves time looking for what you need. Think of the time and money you can save.
- Keep your tools and equipment clean and well maintained so they work when you need to use them.
- Clean up spills you see, or report them to the appropriate person – never assume someone else will look after it.
- When cleaning up spills of unknown materials, wear the personal protective equipment to protect you from flammable liquids, vapours, and corrosive materials.
- Keep the floor clear of slush, snow and water – this keeps your feet dry and warm and helps prevent injury and illness.

### After Work

- Sweep the bay and other work areas between each job – this removes slip and trip hazards.
- Empty garbage containers before they get full or overfilled – this helps keep the floor clean and stops you from having to throw the same things out two or three times.
- Put tools/supplies back in the proper storage area (e.g., tool room or storage cupboard) – this saves time the next time you need them.

### And Remember

- Do not use air blower to clean off clothing, hair or any other body part.
- Do not place tools, parts or fluids on hoists or the undercarriage of a vehicle.



## Did You Know?

- Five minutes of clean up between jobs can save, on average, 30 minutes of clean up time at the end of the day.
- It takes more time to complete a job in a cluttered or messy work area than in a clean one.
- Most accident scenes are filled with clutter such as damaged and replaced parts.

# SAFE WORK PRACTICES AT COLLISION REPAIR FACILITIES



## What Can Happen

Slips, trips, fire, illness and/or injury to yourself or other people.

## What You Can Do

### Storage

- Keep storage cabinets and rooms closed.
- Ensure that storage rooms and cabinets are clearly labeled.
- Keep flammable materials away from sources of ignition.

### At Work

- Look for less hazardous products to substitute for hazardous materials.
- Create safe operating procedures for hazardous operations or pieces of equipment in your workplace (i.e., battery filling stations, hot work operations, elevated locations).
- Be aware of the major hazards in your workplace:
  - designated hazardous chemicals (i.e. isocyanates, silica, asbestos)
  - flammable liquids and vapours (i.e. solvents, paints, thinners, gasoline, hydrogen from charging batteries, welding fumes).
  - air contaminants (i.e. dusts, mists, vapours, fumes, gases).
  - overuse of your muscles and joints (i.e. repetitive strain, lifting heavy weights).
  - moving vehicles (i.e. being driven or lifted on hoists or jacks).
  - sharp metallic edges causing cuts (i.e. autobody parts, engine parts).
  - noise and vibration from tools (i.e. drills, sanders, compressors, air-driven tools).
  - energy sources (i.e. electrical equipment, hydraulic hoists).
  - equipment (i.e. ensure appropriate for task and that all guards are present).

### After Work

- Clean up your work area between jobs, at the end of the day and more often if necessary.
- Clean up spills immediately to avoid slips, trips, and falls.
- Keep floors and other work surfaces clear and free of debris, obstructions, tools and equipment. Avoid horseplay.



## Did You Know?

- Employers should ensure that all actual and potential hazards in your workplace have been identified and controls have been put in place to reduce potential for injury.
- Employers should ensure employees are fully trained in the use of any equipment, material or process before completing any task for the first time.
- Employers must provide employees with WHMIS training updates annually when employees work with hazardous chemicals.

# OCCUPATIONAL HEALTH AND SAFETY POLICY FOR COLLISION REPAIR FACILITIES



## Why It is Important

It is important that a company have a written, well-defined and clear Occupational Health and Safety policy because a good policy makes it easier to enforce rules and procedures. It also makes it easier for supervisors and employees to comply with rules and procedures. It helps to ensure that the provincial legal requirements are met. Employers are required to prepare, post and review the policy annually under the provincial health and safety regulations.

## What You Can Do

### Preparation

- Prepare a policy that reflects management's commitment to health, safety, and the environment.
- Review the health and safety policy annually and ask your supervisor if you have any questions about it.
- Discuss the policy with your co-workers to ensure that everyone is doing their part.
- Ensure that a copy of the policy remains posted at all times and is not mislaid or damaged.
- Discuss the policy with all new employees.

## Did You Know?

- Your local prevention resources organization or the provincial or territorial government's labour officials can help you develop a health and safety policy.
- To encourage employees to be committed to health and safety, employers should ask for employee input when preparing the policy.
- The policy must be:
  - in writing and posted in the workplace where everyone has access to it.
  - signed by the highest level of management at the workplace.
  - dated when it was signed or last reviewed.
- After the policy is developed and signed, employers should make sure all employees are aware of it, and understand its importance.

## FOR MORE INFORMATION

Here are some suggested sources for more information on safety, health, and the environment.

- MSDSs and Product Bulletins from your suppliers of paint and other chemicals you use.
- “Automotive Waste Management Guidelines” manual published by the AIA, 613-728-5821.
- AIA Correspondence Course: Transportation of Dangerous Goods, WHMIS, and Disposal of Hazardous Wastes.
- The Canadian Centre for Occupational Health and Safety (CCOHS) 1-800-263-8466.
- Your local Waste Exchange or Recycling Council.
- Your jobber or local autobody association.
- Waste Management Branch of your regional municipality. Check Blue Pages or phone book.
- An independent consultant recommended by the AIA, by your jobber, or your autobody association.
- “The Autobody Profitability Workbook” available from the Canadian Centre for Pollution Prevention, 1-800-667-9790, or see <http://c2p2.sarnia.com>

### The following web sites may be helpful:

#### Canadian Web Sites:

Automotive Industries Association of Canada, <http://www.aiacanada.com>  
Canadian Centre for Occupational Health and Safety, <http://www.ccohs.com>  
Canadian Centre for Pollution Prevention, <http://c2p2.sarnia.com>  
Ontario Safety Service Alliance, <http://www.ossa.com>  
Collision Industry Action Group, <http://www.ciia.com/ciaghara.html>  
Education Safety Association of Ontario, <http://esao.on.ca>  
3M Canada – Respirator Protection, <http://3M.com/intl/CA/ohes.html>

#### USA Web Sites:

Society of Collision Repair Specialists, <http://www.scrs.com>  
Collision Industry Conference, <http://www.ciclink.com>  
Environmental Protection Agency, <http://www.epa.gov>  
CCAR, <http://www.ccar-greenlink.org>  
Auto Body Repair News, <http://www.abrn.com>