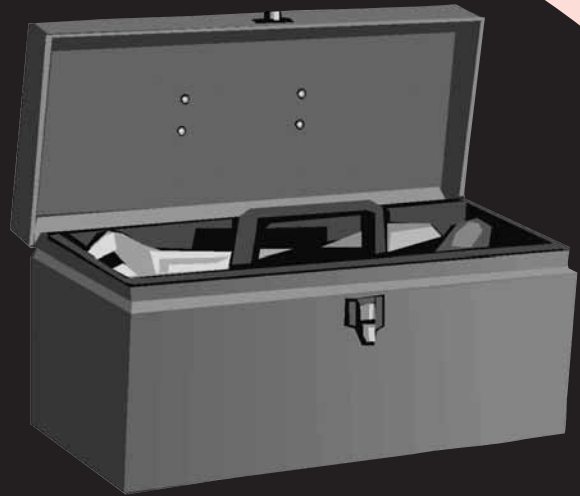


# SAFE SHOP TOOLBOX

Helpful business  
and safety information  
for auto shop workers,  
managers, and owners



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THOMAS M. MENINO  
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# 617-534-5966



You may be able to save some money and the environment by taking steps to **minimize waste, recycle, and choose less toxic chemicals** at your shop. Proper housekeeping practices can reduce the amount of waste produced and good environmental choices can benefit your business by reducing the high costs of disposing of your hazardous waste. Here are some tips that can help your pocketbook, your employees and your image in the community:

- ◆ Keep track of your inventory and assess when things need to be reordered. Don't store too many hazardous materials that could result in a spill. Do weekly inspections of the area to make sure there are no spills and things are clean and properly labeled.
- ◆ When placing orders with your vendor, ask about less hazardous alternatives and check MSDS (Material Safety Data Sheets) for hazardous ingredients in the products that you purchase.
- ◆ Choose materials that are recycled, non-toxic and water-based. Keep good records of materials that did and did not work and share your results with neighboring shops.
- ◆ Avoid chlorinated solvents.
- ◆ Ask your vendor to take back empty containers to get refills. This will help you keep track of your inventory, reduce wastes, and save money and the environment.
- ◆ Keep hazardous wastes separated and clearly labeled. Often, recycling companies will charge you much less to dispose of wastes (or even pay you for your wastes) if they're properly separated and marked.

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**RECYCLING, LESS TOXIC ALTERNATIVES, AND WASTE REDUCTION**

As a person working in an auto shop, you come into contact with many health hazards on a daily basis. It is part of your every day job to fix cars and provide customer satisfaction by welding, painting, sanding, or changing a car's vital fluids. These necessary tasks can be done safely when following basic safety guidelines and using the appropriate Personal Protective Equipment (PPE) to protect your lungs, skin and eyes from hazardous chemicals and dust.

### PPE for your lungs:

- ◆ For painting, washing parts and when using chemicals: Respirator with a Volatile Organic Compound (VOC) Cartridge.
- ◆ For sanding or doing brake work: Respirator with a Particle Filter.

### PPE for your skin:

- ◆ When washing parts, changing oil and vital fluids, and handling chemicals use Protective Rubber Latex or Nitrile Gloves.
- ◆ When welding, use Leather Welding Gloves and a Leather Welding Apron. A Welding Mask with a Hood will protect your skin from stray sparks.

### PPE for your eyes:

- ◆ When sanding or doing a job that stirs up dust, use Safety Goggles to protect your eyes.
- ◆ When handling or pouring chemicals, use Splash Goggles.
- ◆ If you get chemicals or particles in your eyes, use the Eyewash Station or follow the instructions on the chemical MSDS.

### Basic Safety Guidelines:

#### **Protect your eyes, lungs and skin!**

Use PPE to prevent harmful particles and chemicals from getting into your body.

#### **Keep a clean and sanitary shop!**

Avoid spills and keep the floor free of debris at all times. Make sure safety equipment is working and properly maintained and that safety exits are not blocked.

#### **Have a safety plan!**

Develop and practice a plan on what to do if there is a fire or medical emergency.

#### **Become familiar with you MSDS!**

A Material Safety Data Sheet will tell you the dangers of each chemical. Keep them on file and know how to read them.

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## PERSONAL PROTECTIVE EQUIPMENT

Your shop must have a designated area where containers of waste are managed until they are picked up for recycling or disposal.

### Hazardous Waste Storage Area:

Your hazardous waste storage area must meet the following conditions:

- ◆ Clearly mark the area's edges (for example, yellow painted lines could be used)
- ◆ Post a sign that says "HAZARDOUS WASTE" in letters that are at least 1-inch high
- ◆ Check hazardous waste containers weekly for rust, cracks, or other damage that may lead to a leak
- ◆ Segregate the different types of waste. Do not mix waste oil with other waste
- ◆ Cover and surround outside hazardous waste storage area with secondary containment such as a berm to capture leakage
- ◆ The waste area must be secured against unauthorized entry



### Labeling of Hazardous Waste:

Every hazardous waste drum must be labeled with:

- ◆ The words "HAZARDOUS WASTE"
- ◆ The name of the waste (for example, "waste paint solvent")
- ◆ The type of hazard (for example, "ignitable, corrosive, reactive, or toxic")
- ◆ The original date that accumulation of the waste began

### Disposal of Hazardous Waste:

Hazardous waste must be transported and disposed of by a licensed hazardous waste transporter.

- ◆ Contact the DEP Hazardous Waste Hotline at (617) 292-5898 for a list of licensed hazardous waste haulers
- ◆ Before hazardous waste can be accepted for disposal, you must completely fill out a hazardous waste manifest and sign it
- ◆ Copies of all hazardous waste manifests must be kept on site for a period of three years

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## HAZARDOUS WASTE STORAGE AND DISPOSAL

Auto repair and body shops can be dangerous places if there are fire hazards, fall hazards, or unsanitary conditions present. Here are some guidelines to help keep you and your workers safe:

### Sanitation:

Employees must not eat or drink in any area exposed to a toxic material such as paint fumes, waste fluids, and other chemicals. Good workplace sanitation includes:

- ◆ Having a good supply of clean water for drinking and washing – water bubbler or tap water
- ◆ Maintaining clean, sanitary, and working toilet facilities
- ◆ Keeping all work and storage areas clean, organized, and dry
- ◆ Using closed, leak- proof waste disposal containers
- ◆ Hygienic food handling
- ◆ Having a separate eating area away from toilet areas and work areas

### Fire Safety:

Welding, cutting, and other activities can create a fire hazard in the shop; especially if there are flammable materials or debris around. To help you prevent a fire in your shop:

- ◆ Welding work should be done at least 35 feet away from any combustible materials
- ◆ Combustible materials such as paper, wood, or cloth should be swept up and removed from floors or otherwise removed or protected by damp sand or fire resistant shields

### Fall hazards:

You can reduce worker accidents by:

- ◆ Installing guardrails and toeboards around platforms, stairwells, and floor and wall openings
- ◆ Covering holes with removable lids or manhole covers
- ◆ Making sure all stairways have a handrail on at least one side

Housekeeping should be part of the daily work routine. Keep parts and tools stored neatly when not in use and clean up spills right when they happen. You should take the last few minutes of the workday to check the work area and clean up any messes. Be careful to keep oil and other liquids that could cause you to slip and fall off the floor. By keeping floors painted and clean, spills and objects are easier to see and clean up.

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You have the right to a workplace that does not make you sick or hurt you. OSHA requires employers to provide a workplace that is free of recognized hazards. You can call MassCOSH at 617-825-SAFE (7233) for questions about your rights at work.

### Right Not to be Discriminated Against for Health and Safety Activity:

- ◆ You have the right to demand a safe workplace without fear of punishment

### You Have the Right to Know about Chemical Hazards:

- ◆ Material Safety Data Sheets (MSDS) on all chemicals you might be exposed to at your work place should be made available for you to read
- ◆ Proper labels should be on all hazardous chemicals

### You Have the Right to Information About:

- ◆ Chemicals used at work
- ◆ Injuries and illnesses that happened at work to co-workers or past employees
- ◆ Your medical records
- ◆ Tests your employer has done to measure chemical and noise levels

### Right to Health and Safety Training:

- ◆ Your employer is required to provide training on safety and health hazards at your workplace and the ways you can protect yourself from chemical exposure

### Right to file an OSHA Complaint:

- ◆ You have a right to file a complaint with OSHA if you think your workplace is unsafe. You can file a complaint either in writing or by telephone.
- ◆ **If you want OSHA to come and make an inspection of your workplace, put your complaint in writing and send it to the OSHA office nearest you. Call 1-822-321-OSHA to get the location of the nearest OSHA office.**

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# WORKER TRAINING AND RIGHT TO KNOW



- ◆ **Boston Business Assistance Center** (financial help for Boston businesses): **617-989-9100**
- ◆ **Boston Fire Department** (Special hazards, licensing, or permitting questions): **617-343-3447**
- ◆ **Boston Inspectional Service Department**: **617-635-5300**
- ◆ **Boston Police Department, Licensing**: **617-343-4425**
- ◆ **Boston Public Health Commission, Environmental Health Office**: **617-534-5966**
- ◆ **Bowdoin Street Health Center** (providing health care for those with or without health insurance in the Dorchester area, as well as referrals to an occupational health doctor): **617-754-0041**
- ◆ **Division of Industrial Accidents** (for Workers Compensation Insurance): **800-323-3249 x 470**
- ◆ **Division of Standards** (for shops in the damage repair business): **617-727-3480**
- ◆ **Dorchester Bay Economic Development Center** (providing increased access to financial and technical assistance for Dorchester area auto related businesses): **617-825-4200 x 219**
- ◆ **Massachusetts Coalition for Occupational Safety and Health** (MassCOSH): **617-825-SAFE (7233)**
- ◆ **Massachusetts Department of Environmental Protection**: **617-654-6500**
- ◆ **Mayor's Health Line** (for information on finding a doctor, free health care, affordable prescription drugs and other health related information): **617-534-5050**
- ◆ **Mayor's Office** (for general questions): **617-635-4500**
- ◆ **National Institution for Occupational Safety and Health Info. Line** (NIOSH): **800-35-NIOSH (64674)**
- ◆ **Occupational Safety and Health Association Information Line** (OSHA): **800-321-OSHA (6742)**

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## USEFUL PHONE NUMBERS AND LOCAL RESOURCES

As a shop owner, there are a number of certificates, licenses and permits that you need to run a safe and legal business in the City of Boston. We know how difficult it is to stay on top of all of the papers that you need so this checklist shows most of the common permits you will need along with helpful numbers you can call to ask for application forms or get the answers to questions so that you can keep your shop violation-free.

### Inspectional Services Department (617-635-5300):

- Use and Occupancy
- Flammable Storage and Garage Permits (both ISD and BFD)
- Class 2 and Class 3 permits for sale of used cars and car parts
- Garage Permit

### Boston Fire Department (617-343-3447):

- Flammable Storage and Garage Permits (both ISD and BFD)
- Torch Permit
- Oxygen and Acetylene
- Dumpster Permit
- Certificate of Registration

### Department of Industrial Accidents (800-323-3249 x 470):

- Workers Compensation Insurance - All employers in Massachusetts are required by state law to carry workers' compensation insurance covering their employees, including themselves if they are an employee of their company

### Division of Standards (617-727-3480):

- Registered Shop Number for shops in the damage repair business

### Department of Environmental Protection (617-292-5898):

- Hazardous Waste Generator Number

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As a business you must take precautionary actions to minimize the risk of fire, explosion, or release of hazardous wastes that may contaminate the environment and your neighborhood. The following requirements apply to your shop and must be immediately accessible to your hazardous waste handling area:



**An Alarm** or communication system which can provide emergency instruction to employees



**A Telephone**, two way radio or other device which can summon police, fire, or emergency response teams



**Portable Fire Extinguishers** and/or fire control equipment (like foam or inert gas), and spill control/ decontamination equipment



**Adequate Supply and Pressure of Water**, automatic sprinklers or water sprays, or foam-producing equipment



**All Equipment Must be Periodically Tested** and properly maintained so it will work during an emergency



**All employees must be instructed** in emergency procedures



**All exits** must be clearly marked



**Emergency phone numbers** and an evacuation plan must be posted

You should develop a floor plan of your shop to show:

- ◆ Areas where employees may be working
- ◆ Evacuation routes, entrances, exits
- ◆ Alarm, telephone
- ◆ Water faucets, hoses and fire hydrants
- ◆ Areas where hazardous products may be located
- ◆ Emergency equipment such as fire extinguishers, shovels, overpack drum, absorbent materials, etc.

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## EMERGENCY PREPARATION AND RESPONSE

## Compressed Air:

Air pressure can blow chips and debris into eyes and can tear skin. Maximum air pressure around a human is 30 Pounds Pressure.

- ◆ Wear eye protection
- ◆ Never use high pressure air to blow off clothing
- ◆ Never use compressed air to blow dry parts

## Gases:

- ◆ Keep compressed gas cylinders away from excessive heat
- ◆ Store compressed cylinders where they will not be damaged or knocked over by passing or falling objects

## Welding, Cutting and Brazing:

Welding involves many hazards.

- ◆ Protect your eyes from permanent damage by wearing a welding mask
- ◆ Do all welding activities away from flammable or combustible gases or fuel
- ◆ Wear the right respirator during cutting and welding
- ◆ Protect yourself from cuts and burns by wearing leather gloves

## Respirator Use:

It is important to use the right respirator type and design for the right job.

- ◆ Routine inspection, maintenance and adjustment are essential. Respirators may also pose a sanitation hazard. Respirators that are mechanically defective may pose an asphyxiation hazard
- ◆ They should be cleaned and disinfected after use and stored in a clean and sanitary location to avoid bacterial contamination
- ◆ Your employer should have proper ventilation to reduce exposure if you accidentally remove or dislodge your respirator during the job
- ◆ Employers are required to supply respirators when needed to protect the health of the workers

## Noise hazard sound level:

- ◆ Noise hazards can be reduced by installing sound mufflers, barriers or dampers (engineering controls)
- ◆ Provide workers with personal protection such as ear plugs or similar hearing protectors

## Parts Washers:

- ◆ Select environmentally friendly solvents
- ◆ Protect hands with proper gloves
- ◆ Allow parts to drip dry over parts washer sink
- ◆ Never use compressed air to blow dry parts
- ◆ If parts are still wet, dry with shop towels or rags

## Jackstands:

Must be used to support vehicles before workers are allowed underneath

## Abrasive Wheel Grinders:

Must be operated with all covers and the tool rest adjusted to 1/8 inch maximum clearance

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### Safety Tips for Spray Painting:

All painting must be done in a paint spray booth that will exhaust flammable vapors and has been approved by the Boston Fire Department, Inspectional Services Department and the MA DEP.

- ◆ Exhaust filters must be at least two inches thick and changed as directed by the manufacturer
- ◆ Use an enclosed gun washer to clean spray guns and recycle used solvent
- ◆ Wear proper personal protective equipment such as a Tyvek suit, a respirator, gloves and a hood
- ◆ Train employees in proper health and safety precautions for handling paints, coatings, solvents and in proper mixing and application procedures such as using either high volume, low pressure (HVLP) or low volume, low pressure (LVLP) spray guns



### Noise hazard sound level:

- ◆ Noise hazards can be reduced by installing sound mufflers, barriers or dampers (engineering controls)
- ◆ Provide workers with personal protection such as ear plugs or similar hearing protectors

### Basic Requirements for a Spray Booth:

- ◆ All electrical wiring and lighting located in the booth must be explosion proof
- ◆ Exhaust flow must be vertical and unrestricted by rain protection
- ◆ Stack height must be 10 feet above roof level or 35 feet above ground level
- ◆ There may be no visible emissions from the stack

### Safety Tips for Grinding, Sanding, and Filling:

- ◆ Use a vacuum sander at the source of generation to provide adequate ventilation when grinding and sanding
- ◆ Wear proper protective equipment when mixing and applying body filler such as goggles with side shields, gloves, and particulate masks or respirators
- ◆ Use the least toxic filler materials or paint strippers available

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