

Safety In The Home Shop

With the right products and attitude, your shop can be an accident-free zone.

If you're into the adrenaline rush that comes from the dangers of thrill-seeking, stick to skydiving instead of power tools. The workshop is no place to risk life, limb, or fingers by taking unnecessary risks.

The safety products on these pages will help protect you, but it's your attitude and commitment toward safety that's the real key to avoiding injury. For example, keep tool guards and shields in place whenever possible. Don't work when you're overly tired or try to rush a job to completion. In both cases, you're likely to lose the edge that keeps you safe.

Eye protection

Protecting your eyes is one of the foremost rules in any shop setting. Safety glasses with side shields are the basic standard that you should wear virtually all the time when working in your shop. For outside jobs, grab a tinted pair to serve as protective sunglasses. Get an eyeglass cord at the drug store, and you'll never need to remember where you set down your glasses. (This tip also helps protect the glasses from scratches.) While you're at the drug store, also get some anti-fog spray or liquid. This solution prevents fogging, which is especially common when you're also using a dust mask.



Goggles, left, provide a high degree of protection. Choose tinted safety glasses, above, for outdoor use, and a clear pair, right, for inside.



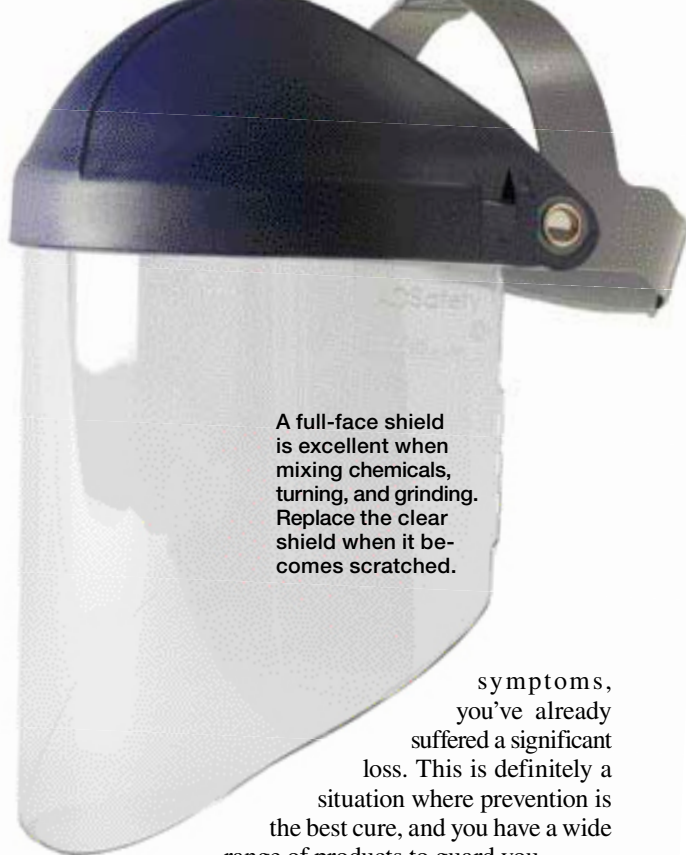
In a particularly dusty environment—sanding dry-wall for example—you may want to upgrade your eye protection to goggles. Goggles are also a good choice when mixing or handling chemicals.

A face shield is another effective device when dealing with chemicals. Its full-face coverage is also great protection when cutting or grinding metals or turning at the lathe. The typical face shield has a headband that adjusts for a comfortable fit, and the shield itself pivots upward. When the shield gets too scratched for easy viewing, you can keep the headgear and replace only the clear plastic shield.

If you need reading glasses for close work, get bifocal safety glasses from a specialty source such as Lee Valley or Woodcraft. Available in wide range of powers, they are surprisingly affordable.

Hearing protection

Exposure to loud noise, especially for a sustained period, can cause permanent hearing loss. While people vary in their reaction to noise levels, nobody is immune to hearing damage. Unfortunately, by the time you finally admit the



A full-face shield is excellent when mixing chemicals, turning, and grinding. Replace the clear shield when it becomes scratched.

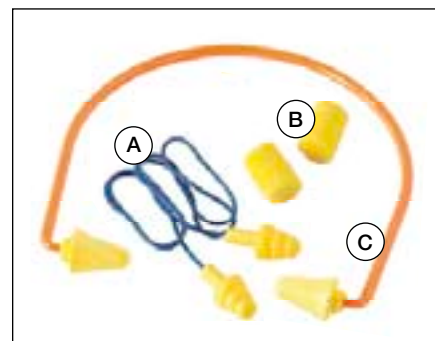
symptoms, you've already suffered a significant loss. This is definitely a situation where prevention is the best cure, and you have a wide range of products to guard you.

When you're shopping for hearing protection, note the Noise Reduction Rating (NRR) of each product. The bigger the NRR number, the more sound it blocks, providing higher protection.

You may be surprised that foam earplugs are one of the most effective noise blockers—usually rated with a NRR of 28—and they are also the least expensive product. If you choose these, be sure to carefully follow the insertion instructions to get the plug seated in the ear canal, not merely in the outer part of your ear.

A band-type hearing protector is also inexpensive and very effective, but again you need to make sure that cones aren't merely in your outer ear.

Earmuffs are popular because of their convenience, although they usually aren't as effective as a properly-inserted band or earplugs. Some earmuffs even include



Here are three low-cost approaches to hearing protection: corded gel plugs (A), foam ear plugs (B), and a band-type protector that can be worn several ways (C).

electronic noise-suppression technology. Others even have a built-in radio, but we're not enthusiastic about that particular style because of the temptation to turn up the volume during periods of high noise that you're trying to block. That could turn into a case of trading one damaging source for another. By the way, the earbuds and headsets of portable music players offer zero protection, and the sound from that source adds to the total noise level.



A wide headband and cushioned cups make these earmuffs comfortable, and noise-cancelling technology improves the protection they provide.

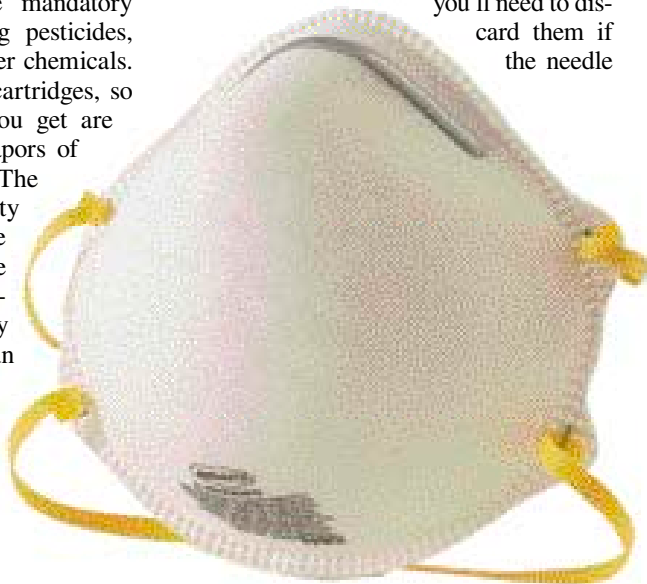
The bottom line: the best hearing protection product is the one that you'll actually use.

Breathing protection

For many years, craftspeople considered dust as merely a nuisance. But exposure to dust of all kinds has recently been proven as a cause of cancer. Not surprisingly, even amateur woodworkers are buying dust-collection systems to keep the problem under control. Big chips and large pieces of dust—down to about 5 microns—are relatively easy to capture, and grabbing them makes a huge difference in the appearance of the shop. The irony, however, is that these large pieces aren't the problem. The real culprits that can damage you are under 5 microns in size. So if you're in the market for a dust collector, look for one that grabs pieces down to 1 micron, or upgrade a stock collector with an aftermarket high-efficiency bag or filter.

Cartridge respirators are mandatory for paint spraying, applying pesticides, and working with many other chemicals. There is a wide variety of cartridges, so make sure that the ones you get are specifically rated for the vapors of the products you're using. The mask itself is made in a variety of sizes; ensure that the one you choose fits properly. The clerks at automotive paint-supply stores are usually experienced painters; they can

Choose masks that carry a NIOSH 95 or N95 rating, *right*. Forget about so-called "nuisance" dust masks because they don't provide the protection you need.



give you professional respirator selection and fitting advice. If you have a beard, no respirator made will give you a good seal, so you need to choose between whiskers and clean lungs. Here's a quick tip: Extend the life of your respirator by storing it in a tightly sealed plastic bag between uses.

You should also note one other important fact about respirators: They all

reduce the amount of air you get with each breath. If you have asthma or a pulmonary impairment, check with your doctor before choosing any respirator.

If you want a respirator for such projects as installing insulation or sanding drywall, choose one labeled NIOSH 95 or N95. This rating shows that it's more effective than the cheapie "nuisance" dust masks. To reduce the effort of breathing through this disposable respirator, choose a model with an exhalation valve.

Fire extinguisher

A fire extinguisher is a great idea for your shop because you may be able to quickly smother a fire before it gets out of control. We recommend a 10-pound extinguisher with an ABC rating. The "A" designation covers fires consisting of trash, wood, and paper; "B" covers liquids; and "C" is for electrical equipment.

The units that you'll find in home centers typically cannot be recharged, so you'll need to discard them if the needle



Get a 10-pound extinguisher rated ABC because it handles fires of trash, liquids, and electrical equipment.

on the pressure gauge reads above or below the recommended range. An extinguisher purchased from a local safety specialty shop may be a better value in the long run because it can be recharged. It's a good idea to take it back to the shop once a year for a checkup. The procedure takes only a few minutes and costs about the same as a fast-food lunch, but it provides valuable peace of mind. ♣

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Protect your lungs with a respirator when you're spraying paint, mixing, or applying chemicals. Make sure the cartridges are rated for the materials you're handling