# Buying a new or used car when you have MCS



How to buy a car that has fewer chemical fumes when you are chemically sensitive.

Keywords: how to buy car, vehicle, chemicals, heavy metals, new car smell, chemical sensitivity, MCS

The interior of a new or used car can expose people to a wide range of chemicals and heavy metals. They can be noxious to people with chemical sensitivities (MCS).

People with MCS have sensitivities that range from mild to severe, with most people having the milder versions. People with severe MCS may have to spend a

lot of time looking for an acceptable used car, and may not be able to get a new one.

Car interiors are loaded with heavy metals such as lead, mercury, chromium, arsenic and antimony (Ecology Center 2012). Several are used for coloring carpets, seats and plastic parts. Leather seats are usually treated with chromium. Copper is sometimes used as an anti-fungal and other uses.

With all these metals our concern is direct skin contact from touching the steering wheel and from touching the seats with bare legs. Also, as the interior ages, fibers and some plastics may break down into dust that might be inhaled.

We are not aware of any studies of how much people sitting in a car absorb of these metals.

#### New or Used?

Most people with MCS drive older cars – and tend to hold on to them much longer than regular people.

But once a car is older than about ten years, it tends to become less reliable. Choosing a reliable brand can help. It is no coincidence that many people with MCS drives older cars from Toyota, Honda and a few other brands.

A new car will have the "new car smell," which is a cocktail of many chemicals offgassing from the seats, dash board, headliner, carpets, side panels and more. These include plastics, flame retardants, fabric treatments, rust inhibitors, paints and much else. All these each contain many chemicals, so the inside air in a car may contain up to two hundred different chemicals, many of them known health hazards (Travers 2016).

A used car will have much less fumes from the materials of the car, but new chemicals may have been added, such as fragrances, personal care products, cigarette smoke, and chemicals used for the upkeep of the interior. A used car may also have become moldy.

If you buy a new car, expect a lot more work to detox it than if you buy a well-chosen used car.

## Choosing the type of vehicle

Before going to look at cars, it is helpful to think about what kind of vehicle would work best.

Besides the usual reasons to prefer a particular type of vehicle, these are also some MCS-specific considerations.

Having a cargo space that is separated from the driver is better for hauling stinky cargo. This means a car with a trunk, or a pickup truck.

Cargo vans are made to haul cargo or intended to be modified for camping or other needs. They come with a lot less plastic panels and carpeting and are easier to clean up.

Do you intend to sleep in the vehicle when traveling? A van or a pickup with a shell may then be the better choice than a car.

#### **Built-in air filters**

Several car models have built-in air filters. These filters are designed to catch dust and pollen. Some tout they also have carbon to absorb fumes, but they are really puny and will quickly become saturated.

A separate air cleaner is much better. There are a couple available designed for people with MCS.

## Buying a new car

New cars are all toxic, though some models are better than others. In the years 2006 to 2012 the Ecology Center tested hundreds of cars for chemicals and heavy metals (Ecology Center 2012). They found the chemicals varied much between car models. In their 2012 report they found models from Honda, Toyota, Acura, Audi and Smart to be the least toxic.



However, the Ecology Center tested for only a few specific chemicals and heavy metals. They did not provide measurement of the overall chemical contamination of the air, so their top-rated vehicles may not actually be the least toxic.

Since car models are changed every few years, these ratings are no longer of much use. Though, Honda and Acura do enjoy a long reputation in the MCS community as being somewhat better.

The same model car is sometimes built with different materials depending on which country it is sold in (Ecology Center 2012). Europe has stricter chemical laws and buyers over there are more concerned about these issues than Americans. Even Chinese buyers are said to be more concerned (Eisenstein 2018).

Some car manufacturers have over the past two decades made announcements that they were reducing their use of toxic chemicals, including Volvo, Honda, Ford and others. But it is murky whether that applies to all models, sold in all countries, and by how much.

Manufacturers of any kind of product tend to say little about health problems from older products in case it can be used against them in a lawsuit.

It appears that sensitive people tend to do better with new cars that have leather seats than other types of seat materials.

Some people have tried to buy the oldest car on the dealer's lot by coming when the new models arrive and look for last year's model. We have heard one case where it helped and another where it didn't.

### Buying a used car

Used cars can range from nearly perfect to as bad as when it was new. It all depends on how it was used and maintained. The original chemical smell will gradually die down after some years, especially if the owner lets a lot of fresh air inside.

We have seen a car that was 12 years old that smelled as if it was nearly new. It had just one owner, who never opened the windows.

Many car owners add fragrances to their car. Sometimes it is to mask moldy smells, so a buyer can't tell. A car that is lightly fragranced can be cleaned up, but mold cannot.

Some cars have oily smells from sunscreens or other skin products. These tend to get embedded in the seats and steering wheel, as well as other places and are very difficult to get rid of.

Fabric softener can also be transferred from clothes and into the seats.

Some car owners use nasty chemicals on the plastic panels to make them look new and prevent cracking. This is commonly done on top of the dashboard.

Forget about cleaning up a smoker's car.

When a used car dealer receives a new car, they vacuum and wash the car and often also "detail" it. Detailing involves applying toxic chemicals to the interior to make the plastic parts look like new (Armor-All is a common product). They may also add a fragrance that mimics the "new car smell."

A car dealer may do small repairs to improve the resale value. They are unlikely to invest in major repairs.

Ask the dealer if they do detailing. Some dealers do not. Some MCS people have been able to make an agreement where the dealer holds off doing any detailing when they get a car of the type you are looking for. Instead they call you and you have 24 hours to come and look at it before they detail it.

If the car smells musty, pass it over. It is very difficult to get mold out of a car. When testing the car, be sure to run the air conditioner and smell the air coming out of it. A/C units are particularly prone to developing mold.

If the car is heavily fragranced it may be to cover mold smells. And who knows what other toxic smells are hidden as well.



If you need to buy a car that is older than 5-7 years, make sure to choose a reliable brand. The American magazine *Consumer Reports* rates all models once a year and is a great resource. The reports are available on their website.

## When to go car shopping

It can save exposures to call a dealer and ask if they have what you are looking for, before going there. Just be aware that a salesperson may try to get you to come regardless of what they actually have available.

It is best to go on a warm sunny day, so the car will be hot and the most smelly. A car will smell a lot less on a cold rainy day.

Some car-buying books recommend buying a car at the end of the month. Salespeople who have not yet met their quota should be eager to close sales and make their best offers. On the other hand, they may be even more pesky.

## **Choosing the salesperson**

If the salesperson whom you first talk to reeks of cologne, ask for another one. Be polite, state you are strongly allergic to colognes (or smoke, or fragrances) and ask to be served by someone else. Don't be shy about this, they want to make a sale and people tend to understand "allergies" (even though MCS is not an allergy, it is much easier than trying to explain MCS).

If you allow a "reeker" to serve you, it will be really hard for you to smell-test a vehicle. And most dealers insist the salesperson comes along for a test drive.

### Stay Outside

Don't go into their office or showroom. It is likely to be extremely toxic from displayed cars, tires, etc. There is no reason you can't complete a sale outside. Just tell them you are extremely allergic to chemical fumes.

### **Test driving**

Test driving the car is essential to check it out, but it is also perilous. Unless you are very lucky, the car will be stinky and the salesperson will insist on riding along.

You could bring along a respirator.

You could ask the manager for special permission to drive without the salesperson (offer your credit card).

Drive with all windows fully open.

Bring along a friend to do the test drive for you.

## Bring a friend

Bring a friend when hunting for a car. Your friend can give you a second opinion and can also distract the salesperson so you can concentrate on checking out the car.

If you are not mechanically minded, a savvy friend may save you from buying a car with hidden defects. An extra set of eyes and nose may discover things you

don't notice, especially when a salesperson is working hard to distract you from looking too closely.

Consider asking your friend to intentionally engage any salesperson so you won't be distracted.

If necessary, you could also bring a friend to be the first person to sniff each car so you don't get overwhelmed by some really stinky cars. Asking the salesperson to not show you "stinky" cars will not protect you.

If your friend has a busy life, or is reluctant to go because of MCS, consider only asking for help when going to look at a car for the second time.

#### **Alternative Sources**

Instead of buying the car from a stranger, try your circle of friends, family, co-workers and neighbors. Ask to check out their present vehicle to see if it works for you. If it does, make them an offer. They may be willing to trade privately.

Auto rental companies sell their cars when they are about a year old. The large companies operate their own sales lots in some of the big cities. If there is one near you, it can be a great place to buy a somewhat-offgassed car. It will have been maintained well.

Another alternative is to use the various internet websites where people privately trade vehicles.

It is easy to trade a car privately, you just need to get the trade registered at the department of motor vehicles. You don't need to go through a dealer (at least for the United States).

## **Detoxing the car**

Some people let their spouse or some other family member drive their car for a couple of years to let it offgas by itself.

For the rest of us, there is usually work to be done, which will be covered in a separate article.

#### **More Information**

For articles about less toxic and low EMF cars, go to www.eiwellspring.org/vehicle.html

### References

Ecology Center. Car Study 2012: new guide to toxic chemicals in cars helps consumers avoid "new car smell" as major source of indoor air pollution, www.healthystuff.org, 2012.

Eisenstein, Paul. That new car smell isn't so popular in China where Ford employs teams, patents new technology, to snuff it out, CNBC website, November 24, 2018.

Travers, Jim. Is new-car smell bad for your health?, British Broadcasting Corporation, March 15, 2016.

2020