



**\*\* ATTN TV Reporters: B-Roll is Available Upon Request\*\***

**EMBARGOED FOR RELEASE  
1:00 p.m. EST, January 11, 2006**

**CONTACT: Shayna Samuels, 718-541-4785  
or Glenn Turner, 917-817-3396**

## **High Levels of Toxic Chemicals Found in Car Interiors, New Study Says**

### **Sun's Heat and UV Light Exacerbate Toxicity Inside Vehicles, Putting Drivers and Passengers at Risk**

### **Volvo Found to be Least Toxic Car Demonstrating Feasibility of Safe Alternatives; Other Companies Urged to Follow Suit**

(Detroit, MI – Jan. 11) -- A first-of-its-kind study released today by the Ecology Center revealed new information about toxic chemical exposure in automobile interiors. PBDEs, used as fire retardants, and phthalates, used primarily to soften PVC plastics (and partly responsible for “new car smell”), were found in dangerous amounts in dust and windshield film samples. Drivers and passengers are exposed through inhalation and contact with dust. These groups of chemicals have been linked to birth defects, impaired learning, liver toxicity, premature births and early puberty in laboratory animals, among other serious health problems.

The study – *Toxic at Any Speed: Chemicals in Cars & the Need for Safe Alternatives* – found that chemicals used to make seat cushions, armrests, floor coverings, wire insulation and other interior auto components are more rapidly released into the air in extreme temperatures. Since automobiles have 360-degree windows surrounding the interior, cars can heat up to 190°F. In addition, UV exposure from parking in the sun creates a favorable environment for chemical breakdown, causing PBDE flame retardants to become even more dangerous. Solar exposure in cars can be 5 times higher than in homes or offices, according to the study. **The full report can be found at [www.ecocenter.org](http://www.ecocenter.org).**

“We can no longer rely just on seatbelts and airbags to keep us safe in cars,” said Jeff Gearhart, the Ecology Center’s Clean Car Campaign Director who co-authored the report. “Our research shows that autos are chemical reactors, releasing toxins before we even turn on the ignition. There are safer alternatives to these chemicals, and innovative companies that develop them first will likely be rewarded by consumers.”

The Ecology Center collected windshield film and dust samples from 2000 to 2005 model cars made by 11 leading auto manufacturers. Volvo was found to have the lowest levels of phthalates and the second lowest levels of PBDEs, making it the industry leader in terms of indoor air quality. Volvo also has the toughest policies for phasing out these chemicals. Other manufacturers claim they have eliminated PBDEs and phthalates from particular applications. For example, Ford reports that it has eliminated PBDEs from “interior components that customers may come into contact with.” Honda also reports that it has eliminated most of its phthalate-containing PVC in its vehicles. Other manufacturers tested include BMW, Chrysler, GM, Hyundai, Mercedes, Subaru, Toyota and Volkswagen. Detailed charts listing each manufacturer and their levels of toxic chemicals can be found on [www.ecocenter.org](http://www.ecocenter.org).

Both PBDEs and phthalates are considered chemicals of concern due to their toxicity and ubiquity in the environment. Levels of PBDEs found in the breast milk of American women and some fetuses are approaching levels shown to impair learning and cause behavioral problems in lab mice. These chemicals have also been linked to thyroid hormone disruption and liver toxicity in animals. One type of phthalate found in a large variety of polyvinyl chloride (PVC) products, called DEHP, has been linked to premature birth, reproductive defects and early onset puberty in lab animals.

The study found that concentrations of PBDEs in dust and windshield film samples were up to five times higher than those found in homes and offices in previous studies. Since the average American spends more than 1.5 hours in their car every day breathing in these chemicals, the inside of a car is a significant source of indoor air pollution. According to the EPA, indoor air pollution is currently one of the top five environmental risks to public health.

In Europe and Japan, momentum is beginning to move away from toxic chemicals such as PBDEs and phthalates toward safer alternatives. The European Union, for example, passed legislation in 2003 requiring the phase-out of PBDE's in electronic and electrical equipment. As a result, electronics manufacturers such as Apple, Dell, Hewlett-Packard, IBM, Panasonic and Sony have already eliminated PBDEs from their products. The European Union has also required phase-outs of phthalates in toys, childcare items, and cosmetics, resulting in similar elimination efforts in those industries.

In Japan, the Japanese Auto Manufacturers Association (JAMA) recently made headway toward improving air quality in cars when they announced a voluntary agreement of its members to reduce air concentrations of a number of volatile organic chemicals, including phthalates. These chemicals, also known as VOCs, are responsible for what is typically called "new car smell." Several Japanese automakers have indicated efforts to reduce the use of these chemicals as a result of the initiative.

"Most people think about cars causing outdoor air pollution, such as smog," said Gearhart. "Now we know that breathing the air and dust *inside* of cars may be even more dangerous."

In lieu of legislative action at the federal level, at least 9 U.S. states (California, Hawaii, Illinois, Maine, Maryland, Michigan, New York, Oregon and Washington) have passed laws banning the two worst forms of PBDEs, namely penta and octa. Additional legislation is being considered in at least 6 other states, as well as revisions of existing legislation to extend PBDE phase-outs to all uses of deca form, including automotive.

**The new report makes the following recommendations:**

- **For Manufacturers:** Manufacturers should reduce the health risk to vehicle occupants by phasing out PBDEs and phthalates in auto interior parts, setting specific timelines for its material and component suppliers. As an interim step, North American automakers should voluntarily comply with recent Japanese and European initiatives that limit hazardous air pollutant levels in auto interiors.
- **For Government:** Congress and individual states should encourage rapid action to phase-out the use of PBDEs and phthalates by requiring phase-out timelines and providing research and technical assistance to vehicle manufacturers for assessment and development of alternatives. Government purchasers should further require disclosure on the use of these substances in their purchasing specifications. Voluntary efforts should also be given public recognition.
- **For Vehicle Occupants:** Fortunately, car owners can take some direct actions to minimize health risks from PBDEs and phthalates in car interiors. Some of these actions will also reduce the risks associated with other interior car pollutants. Drivers can reduce the rate of release and break-down of these chemicals by using solar reflectors, ventilating car interiors, and parking outside of sunlight whenever possible.