# 9 CONSTRUCTION/RENOVATION

Good indoor air quality should be the chief criterion in planning a construction project. The contractor should require the least toxic materials that are practical, with work schedules that will not put children and teachers at risk with compromised air quality during construction. Particular attention should be given to avoiding wood products that contain formaldehyde as their bonding agents, such as particleboard. Because new furniture is often a source of formaldehyde, it should be required to be formaldehyde-free, just as the new carpeting.



## **10 EXHAUST FROM BUSES OR CARS**

Schools should make sure that the air intakes of the ventilating systems are not in areas where cars or buses idle, which can cause incoming air in the school to be laden with diesel and car exhaust. In addition, school buses should not idle as they let students off at school in the morning and as they fill their buses after school to bring students home.



## 11 CHILDREN'S PLAYGROUNDS

Playgrounds should never be surfaced with shredded waste tire rubber mulch. The rubber mulch contains many carcinogenic compounds, as well as carbon black, which is also a carcinogen. Every tire is made up of between 20% and 30% of carbon black, and small children should not be exposed to all these toxic compounds. Instead, school and town playgrounds should be surfaced with either sand or wood chips, which are much safer surfacing materials.

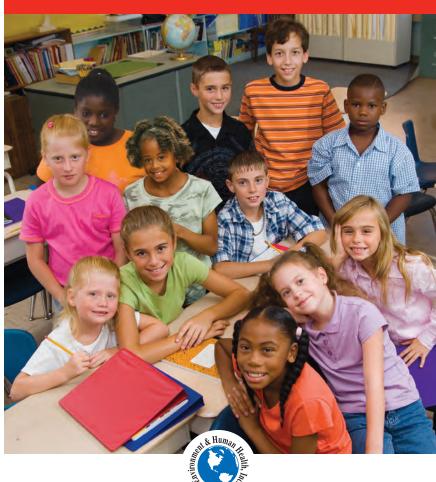


# **12 SYNTHETIC TURF FIELDS**

Environment and Human Health, Inc. (EHHI) maintains that the safest surface for students and athletes to play on is grass. Synthetic turf fields contain many toxic chemicals, the fields get excessively hot in warm weather, they often cause skin abrasions that can result in skin infections, and they are expensive to install and properly maintain. The fields have a shelf life of 10 years at most, and then they need to be replaced—costing close to a million dollars apiece.



# STEPS TO A HEALTHIER SCHOOL



# ENVIRONMENT & HUMAN HEALTH, INC.

1191 Ridge Road North Haven, Connecticut 06473 Phone: (203) 248-6582 Email: info@ehhi.org www.ehhi.org Children spend an enormous amount of their waking hours in the school environment. Children are a vulnerable population due to their small size and unique physiology, and therefore it is important that schools be as environmentally safe as possible. Many of the areas of concern below do not actually cost money to implement, but are simply new ways to look at different situations.

#### **1 PESTICIDES**

Pesticides are toxic, and students should have as little exposure to such chemicals as possible. If a school must use these products inside, they should never be used when students are in the buildings, and parents

and teachers should be notified a day in advance. The least toxic materials possible should be used. Students and teachers should not be allowed back into the buildings until the residue is gone.



Only trained and licensed people should be allowed to spray pesticides. The outside grounds should not be treated with pesticides unless there is a health concern, such as poison ivy, and then prior notice should be given to teachers and parents.

#### 2 ART SUPPLIES AND ART ROOMS

Art rooms should have proper ventilation. Many art supplies are toxic and become airborne, irritating the

lungs and bronchial tubes. It is recommended that ventilating systems have between 15 and 20 cubic feet of outdoor air per minute per occupant. Caution should be used to make sure that the contaminated air does



not circulate into the other parts of the building through the ventilation system.

#### **3 NEW CARPETING**

Many carpets, backings and adhesives contain formaldehyde, and outgas for long periods of time. Children should not be exposed to formaldehyde, much less over long periods. When new carpeting is ordered, the carpet, as well as the carpet backing, should be required to be formaldehyde-free. Also, the installer should be required to use formaldehyde-free and non-toxic adhesives. Formaldehyde is a respiratory irritant as well as a carcinogen.



## 4 DAMP AREAS/DAMP CARPETING

Mold can grow in areas of dampness, and many children and adults are allergic to mold. Mold can cause asthma as well as other health problems. Areas in schools that are wet or damp should be immediately remediated.



## **5 CHEMISTRY LABORATORIES**

Chemistry laboratories and other school laboratories that use hazardous materials should be properly ventilated, making sure that the exhaust does not enter other parts of the building.



#### **6 COPY MACHINES**

Copy machines outgas ozone, and therefore should be well ventilated. These machines are often placed in small unventilated spaces with people working near them. The ozone that copy machines put out is harmful to lung function.



# 7 RADON, LEAD, ARSENIC TESTING

Radon is a colorless, odorless and tasteless radioactive gas that emanates from rock and soil content in the ground. Radon is known to cause lung cancer, and therefore schools should be tested, and if radon is found, should be remediated. Schools should also test their drinking water for lead and arsenic.



### **8 CLEANING PRODUCTS**

Since many cleaning products are toxic, cleaning staff should be required to use the least toxic products that

are efficient and available.

In Connecticut, for example, the law states that no person shall use a cleaning product inside a school unless the cleaning product meets guidelines or environmental standards, as established by an approved third-party



certification program. Teachers should not bring their own cleaning products into their classrooms.

This brochure was underwritten by the Connecticut Health Foundation.