

Sent: Wednesday, February 05, 2003 5:50 PM

Subject: TOXIC CHEMICALS FIND HOME IN OUR BODIES -- CHILDREN AT LARGEST RISK

Dear Aquathin Dealer OnLine;

Every once in a while you come across a prospect that makes the silly remark like "well I've been drinking this water for 75 years and its not hurt me yet !" Twenty five years ago we heard that more often than today. Either the public has gotten more educated or most of those silly commenters died off from the water...or both !

The EWG report found that its nine subjects showed evidence of exposure to an average of 91 compounds, many of which did not exist 75 years ago. The nine individuals were tested for 210 chemicals, which EWG says is the largest suite of industrial chemicals ever surveyed. In total, the nine subjects carried 76 chemicals linked to cancer. Participants carried a total of 48 PCBs, which were banned in the U.S. in 1976 but are used in other countries, and persist in the environment for decades.

You know why children are the largest risk group? Easy...they are born in this day and age in which the problems are manifesting....its all around everywhere you go. 25-50 years ago, doctors thought cancer, cardiovascular diseases were "diseases of chronicity"...a result of getting older if you will. Cancers now even have names when it attacks kids..."childhood leukemia". The rate that such diseases have risen in young demographics IS an environmental problem. The article below should be made available to Customers who are parents to help support their decision to protect their families with the very best home water security system possible.

What you can do? You Authorized Aquathin "sharpees" know. Limit and reduce exposure -- flush them out. Stop bathing in and breathing in VOC's in showers and baths. Hydrate with copious quantities of purified (that means 2 parts hydrogen 1 part oxygen and no parts anything else = Aquathin Patented Process) to flush out. Now understand this....when you're out at a restaurant, hotel or Aunt Minnie's and you drink a soft drink,iced tea or coffee for example, unless it and the ice are made from an Aquathin system, you are intaking the chemical cocktail mentioned below...and equal to the test candidates discovered to have 91 (91 out of 10,000 new chemicals manufactured each year) of the chemicals looked for.

A personal note: After 25 years as a water treatment professional, I am personally pleased more than ever that such a dearth of information is coming out, and that the Aquathin Spash NewsBulletins and Forum Q & A make it immediately available to you. Thank you for your many comments in agreement and and for appreciation of the newsletters. We love our Aquathin !

Warmest regards to all,

FOR THE BEST TASTE IN LIFE
Think Aquathin..AquathinK !!

Celebrating our 23rd Birthday in 2003 !!!
(visit the allnew <http://www.aquathin.com>)

"Alfie"
Alfred J. Lipshultz, President

P.S. "Splash NewsBulletins", "Forum Q & A", "Allergic Reaction", Biz Bank, Tech Bank and Quote Bank... ARE ALL FREE services to all Authorized Aquathin Dealers and their clients to keep you abreast of technology updates and industry news.

Toxic Chemical Study Sounds Warning for Children

By J.R. Pegg

WASHINGTON, DC, February 4, 2003 (ENS) - The most extensive study of the toxic chemicals to which Americans are exposed has found encouraging evidence that levels of lead, pesticides and tobacco related chemicals have declined over the past decade. But the report, released last week by the U.S. Centers for Disease Control and Prevention, offered worrying evidence that children are more exposed than adults to a range of toxic chemicals.

The report is the largest and most detailed study of the U.S. population's exposure to environmental chemicals. It analyzes exposure information for 116 environmental chemicals, more than four times as many as the previous study by the U.S. Centers for Disease Control and Prevention (CDC), published in 2001, which looked at exposures to just 27 substances.

Many of the toxic substances reviewed in the study are already restricted or banned, but remain environmental and health problems, such as PCBs - now banned from most U.S. uses. (Photo courtesy U.S. Geological Survey)

The CDC is an advisory agency, not a regulatory one, and its officials stressed that the primary benefit of the report is as a baseline for future studies.

"In order to make sound public health decisions that help us correctly identify and prevent health problems, we must have reliable information about exposure to environmental chemicals," said Dr. David Fleming, deputy director for science for the CDC. "That's the purpose of the National Exposure Report ... and this second report is a quantum leap forward in providing objective, scientific information about what's getting into people's bodies and how much is getting in."

"We do not have new health effects information coming out from this report," added Dr. Richard Jackson, director of CDC's National Center for Environmental Health. "It would not be possible to say that we have a new understanding of health effects from exposure to chemicals. [But] this kind of information is what moves the science forward to answer those health effect questions, and by finding out what are in people and what levels are typical in the population, we're moving a lot of studies forward that will give us that information much faster."

But CDC officials are clearly concerned about the report's findings with regards to children's exposure to nicotine related chemicals such as cotinine.

Cotinine is a major metabolite of nicotine and regarded as the best biomarker in active smokers and in nonsmokers exposed to secondhand smoke, also known as environmental tobacco smoke.

Children showed far higher blood levels of a biomarker for cigarette smoke exposure - twice as high as non-smoking adults. (Photo by Adam Hart-Davis/[DHD Photo Gallery](#))

Cotinine levels for nonsmoking adults fell 75 percent, but decreased just 58 percent for children and 55 percent for adolescents. Children had cotinine levels that were more than twice as high as levels in adults, and non-Hispanic blacks had more than twice the levels of either Mexican Americans or non-Hispanic whites.

CDC officials said the overall declines in exposure level support the effectiveness of public health efforts, but added that these efforts have focused on adults at work or in restaurants. Further efforts to reduce exposure to children, adolescents and non-Hispanic blacks are warranted, Jackson said.

"One third of all of our cancers are from tobacco," Jackson explained. "It's one of the big killers in America and more than half of our kids still have environmental tobacco smoke exposure when environmental tobacco smoke is known to be associated with sudden infant death syndrome, with ear infections, respiratory infections and the rest."

"If we had to pick something to really go after, that would be one that I would really argue is an extraordinarily high priority and something people can actually do something about," he said.

The Second National Report on Human Exposure to Environmental Chemicals cost the federal government some \$6.5 million over two years. It analyzes blood and urine samples that were collected from some 2,500 participants who are part of the National Health and Nutrition Examination Survey. The participants represent a cross section of the U.S. population for the years 1999 and 2000.

Children, with their developing bodies and brains, are far more vulnerable to ingested toxins than adults.
(Photo courtesy National Center for Lead-Safe Housing)

"It is an immense data set," said Jackson, adding that CDC plans to continue issuing the report every two years and to further expand the chemicals covered.

A total of 89 of the 116 tested chemicals were found to be present in at least some study participants, but CDC officials cautioned that just the presence of a chemical does not indicate a threat to human health. Risk assessments for many of these chemicals are not known for humans, but this study provides a vital tool for scientists to determine how dangerous some of the chemicals are to human health.

The report found that levels of chlorpyrifos, an organophosphate that has been used widely in the United States, are about twice as high in children as those found in adults. Retail sales of chlorpyrifos for residential use were stopped in December 2001 and with this report, scientists now have a baseline for measuring the effectiveness of this restriction.

The scope of the report will also allow scientists and researchers to watch for trends in different age groups, minorities and genders. So far, the researchers have learned, for example, that Mexican Americans have three times the exposure levels to DDE, a major metabolite of the insecticide DDT, which was banned in the United States in 1973.

Flaking paint from older buildings may contain lead. Exposure to lead can cause permanent brain damage, particularly in children. (Photo courtesy Medical University of South Carolina)

For lead, a toxic substance that researchers already know a great deal about what exposure levels are harmful, the report's findings are encouraging. Blood lead levels in children continued to decline, the study shows.

For 1999-2000, the researchers found that 2.2 percent of children aged 1-5 years had blood lead levels greater than or equal to 10 micrograms per deciliter, which is the CDC's definition of an elevated lead level. This figure is down from 4.4 percent for the period 1991-1994.

CDC officials said the continued decline of lead exposure among children in the general population is a public health success story, but warned that lead exposure is still a serious public health threat.

"Exposure of children to lead from homes containing lead based paint and lead contaminated dust remains a serious public health problem," said Dr. Jim Pirkle, deputy director for science at CDC's environmental health laboratory. "CDC and other federal partners will continue important lead poisoning prevention programs targeting interventions to eliminate this entirely preventable disease among exposed children throughout the nation."

Coal burning power plants produce large amounts of mercury and PCBs, known developmental toxins. (Photo by Carole Swinehart, courtesy Michigan Sea Extension)

Industry groups, including pesticide manufacturers and environmentalists, welcomed the CDC's report, although with differing conclusions.

"The pesticide data contained in the report indicates that the American public can be assured that the regulatory safeguards for pesticides that are in place are very tough are working as they are intended," said Jay Vroom, president of CropLife America, a pesticide manufacturers lobbying organization. "Americans can be confident about the safety of our food supply and the public health protections made possible by pesticides."

Dr. John Balbus, director of the environmental health program at Environment Defense, said the report is further proof "that children are more exposed to a wide variety of chemicals, from pesticides and passive tobacco smoke to phthalates."

Balbus praised the study for providing the depth of information needed to determine who is most at risk and what action is needed to prevent exposures.

Exhaust from diesel buses and other vehicles contains polycyclic aromatic hydrocarbons (PAHs), which some studies have linked to increased risk of certain cancers. Photo courtesy EPA

"This country spends \$1.4 trillion every year on health costs," he said. "We don't know exactly what proportion of those costs are due to environmental exposures, but we do know that health costs related to these exposures are unnecessary and can be prevented. This report is an important part of the small investment made to prevent illness."

"To the extent that the CDC report ... brings us good news," added Jane Houlihan, vice president of research for the Environmental Working Group (EWG), "it is because the government took action and regulated harmful substances such as PCBs, DDT and lead in paint and gasoline."

Houlihan's organization, in partnership with Mt. Sinai School of Community Medicine and Commonweal, released a report last week that also tracks chemical absorption in humans. But rather than measuring individual chemicals in multiple individuals, as the CDC did, EWG studied a small group of individuals for a multitude of chemicals.

The EWG report found that its nine subjects showed evidence of exposure to an average of 91 compounds, many of which did not exist 75 years ago. The nine individuals were tested for 210 chemicals, which EWG says is the largest suite of industrial chemicals ever surveyed.

Plastic trash bags and many other common plastic products can contain toxic organochlorines - known to cause developmental and neurological problems. (Photo courtesy Universal Plastic)

In total, the nine subjects carried 76 chemicals linked to cancer. Participants carried a total of 48 PCBs, which were banned in the U.S. in 1976 but are used in other countries, and persist in the environment for decades.

"The CDC's work helps us assess exposure levels for each contaminant across the population," Houlihan said. "Our study begins to document the complex reality of the human body burden - what we call the 'pollution in people'."

The CDC's report is available online at: <http://www.cdc.gov/exposurereport>

The EWG's report can be found at: <http://www.ewg.org>