

## Veille Internet BPA du 22/08/2011 au 4/09/2011

### Bisphénol A (BPA) sur Internet : Faits marquants

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<ul style="list-style-type: none"> <li>• Portlandtribune.com</li> </ul>	<p><b>- A BPA-free county?</b></p> <p>(Orégon- Comté de Multnomah) <i>Le président du Comté de Multnomah, Jeff Cogen, a décidé d'interdire la vente de biberons et autres produits en plastiques contenant du bisphénol A au niveau du comté, ceci après que les lobbies industriels ont fait échouer une proposition d'interdiction au niveau de l'Etat.</i></p>	p9-10



## California Senate Approves BPA Ban for Baby Bottles, Sippy Cups

August 30, 2011

Sacramento, Calif - The California State Senate voted today to ban the toxic plastics chemical bisphenol A from baby bottles and sippy cups sold in California.

The Toxin-Free Infants and Toddlers Act (AB 1319) heads back to the Assembly for a final vote.

"Today's action by the Senate is further proof that the interests of California's children can have a voice in Sacramento," said Renee Sharp, head of EWG's California office.

"Today's vote to eliminate BPA from baby bottles and sippy cups is part of re-asserting California's leadership on environmental health protections," said Martha Dina Argüello, Executive Director of Physicians for Social Responsibility-Los Angeles. "As physicians and health advocates, we need measures like AB 1319 to help reduce exposure to BPA since babies and children are most vulnerable to endocrine-disrupting chemicals."

"Banning the dangerous chemical BPA in baby bottles and sippy cups is just the kind of protective measure the CA Legislature should be spending it's time and energy on," said Elisa Odabashian, West Coast Director of Consumers Union, publisher of Consumer Reports and co-sponsor of the bill. "We applaud them for their leadership."

The legislation, sponsored by Environmental Working Group and authored by State Assembly member Betsy Butler (D-Marina Del Ray) and State Senator Fran Pavley (D-Agoura Hills), would bar BPA in baby bottles and sippy cups made or sold after July 1, 2013. It would also require manufacturers to use the least toxic alternative substance for these products.

Last week, Deborah Raphael, director of the California Department of Toxic Substances Control sent a letter to Butler expressing support for the legislation "in light of the information available regarding the potential health effects of bisphenol A."

In addition to EWG, the legislation was co-sponsored by Consumers Union, Black Women for Wellness, and Physicians for Social Responsibility-Los Angeles.

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<http://www.healthcanal.com/male-reproductive/20126-Utero-exposure-BPA-May-Adversely-Affect-Male-Genital-Development.html>

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**HealthCanal.com**

30/08/2011

# In Utero exposure to BPA May Adversely Affect Male Genital Development

**OAKLAND, Calif., -- In utero exposure to Bisphenol-A may adversely affect male genital development, according to a Kaiser Permanente study published online in the journal *Birth Defects Research*.**

The observational study found that the sons of BPA-exposed Chinese workers had a shortened distance between their genitals and anus -- known as anogenital distance -- compared with sons whose parents were not exposed to workplace BPA.

The association between BPA exposure during pregnancy and anogenital disease also showed a dose-response relationship, meaning the greater the BPA exposure a mother had during her pregnancy, the shorter her son's AGD measured, according to researchers.

“Although the finding needs to be confirmed by additional research, this study provides the first epidemiological evidence that parental exposure to BPA in the workplace during pregnancy is associated with shortened AGD in male offspring,” said De-Kun Li, MD, PhD, the principal investigator of the study and a reproductive and perinatal epidemiologist at the Kaiser Permanente Division of Research in Oakland, Calif. “This finding indicates that BPA may interfere with testosterone function during fetal development because the shortened AGD indicates under-developed male genitalia, likely due to an abnormal testosterone function.”

This study is the fifth in a series published by Dr. Li and his colleagues that examine the effect of BPA in humans:

- The first study, published in November 2009 in the Oxford Journals *Human Reproduction*, found that exposure to high levels of BPA in the workplace increases the risk of reduced sexual function in men.
- The second study, published in May 2010 in the *Journal of Andrology*, found that increasing BPA levels in urine are associated with worsening male sexual function.
- The third study published in *Fertility and Sterility* showed that an increasing urine BPA level was significantly associated with decreased sperm concentration, decreased total sperm count, decreased sperm vitality and decreased sperm motility.
- The fourth study, published in 2011 in the *Journal of Reproductive Toxicology* showed that parental exposure to BPA during pregnancy was associated with decreased birth weight in offspring.

For this study, workers in participating factories with and without BPA exposure in the workplace were identified. They were divided into three groups: unexposed (neither parents exposed to BPA in workplace), father directly exposed (representing maternal indirect exposure through the father), and mother directly exposed during the index pregnancy. Then 153 sons, age ranging from infancy to 17 years old with 81 percent being less than 10 years old, were examined. The study found that maternal exposure to BPA in the workplace during pregnancy was associated with a 2.8 millimeter (approximately 0.11 inch) shortened AGD in sons if the mother was indirectly exposed through the father's direct exposure, and 8.1 millimeter (approximately 0.32 inch) shortened AGD in sons if the mother was directly exposed, compared to unexposed parents.

Funded by the U.S. National Institute of Occupational Safety and Health, this new study adds to emerging human evidence questioning the safety of BPA, a chemical created in the production of polycarbonated plastics and epoxy resins found in baby bottles, plastic containers, the linings of cans used for foods and beverages, and in dental sealants.

The researchers explained that BPA is considered to be a highly suspect human endocrine disrupter with estrogen-like effect.

“This new epidemiological study of in utero BPA’s effects on the fetal male reproductive system provides direct evidence from human studies that is urgently needed as the U.S. Food and Drug Administration and various other U.S. government panels are evaluating this controversial topic,” Li said.

This new finding is also consistent with a recent report from animal studies that in-utero exposure to BPA made male offspring less attractive to female mating counterparts.

Other authors on this study include: M. Miao, MD, PhD, J. Wang, PhD, E. Gao, MD, MPH, PhD, and W. Yuan of the Shanghai Institute of Planned Parenthood Research and National Population and Family Planning Key Laboratory of Contraceptive Drugs and Devices; Guohong Li, Institute for the Prevention and Treatment of Occupational Diseases, Baling Petrochemical Company, Yueyang, China; and Z. Zhou, MD, PhD and Y. He, PhD of the Department of [Occupational Health](#) and Toxicology, School of Public Health and WHO Collaborating Center for Occupational Health, Fudan [University](#), Shanghai.

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## 'Very small' risk from bisphenol A, says Japanese national research body

Post a comment By Rory Harrington, 01-Sep-2011

Related topics: BPA, Quality & Safety, Cleaning / Safety / Hygiene

**The risk to human health posed by bisphenol A (BPA) is "very small", according to the latest update by a Japanese research institute as part of a six-year monitoring project on the chemical.**

The Research Institute of Science for Safety and Sustainability (RISS), part of the country's National Institute of Advanced Industrial Science and Technology, said it had reached its conclusions after examining a range of concerns relating to the substance – including next generation toxicity, carcinogenicity via oral exposure and neurotoxicity.

BPA is a monomer used in the production of polycarbonate baby bottles and the epoxy linings of food and beverage cans. A large number of scientific studies have raised concerns of potential human hazards posed by the use of the chemical in food packaging. However, while its use has been banned in polycarbonate baby bottles in the European Union, all major global food safety authorities, including the European Food Safety Authority (EFSA), have declared current exposure through food contact materials poses no risk to humans.

### **No concerns but no neurotoxicity evaluation**

RISS has been investigating BPA since 2005 as part of a rolling programme. Its latest evaluation involved a two-generation reproductive study using mice under OECD GLP as "*reproductive toxicity in the next generation was one of concerns with regard to the human health hazard induced by BPA*", it said.

It concluded that, in general, there was "*no toxic effects on the reproductive potential*" of offspring and a "*no-observed-adverse-effect level (NOAEL) of 50 mg/kg bw*" was noted.

Its report, published this month, said that carcinogenicity of BPA by oral administration had "*already been determined to be negative from bioassays*".

There is almost no need for concern regarding skin irritation, skin sensitization, skin photo-irritability, and photo-sensitization due to BPA, because these were found to be negative in animal testings at a practical dose level, it added.

The study did not evaluate developmental neurotoxicity of BPA because "*the validity of the testing protocol on chemical compounds with estrogenic activities has not yet been proven*", said RISS.

Experiments in animals that had measured this were deemed "*all too uncertain to conclude as being adverse to humans*".

The NOAEL for the hazard assessment of BPA was determined to be 3 mg/kg bw/day, with the uncertainty factor of 25 (= species difference: 2.5 x individual difference: 10). The body said its previous work concluded NOAEL and uncertainty factor were 5 mg/kg bw/day and 100, respectively,

In the present assessment, the uncertainty factor related to species difference with regard to the extrapolation of animal data to human was determined to be 2.5 because BPA has been shown to be detoxified mainly by glucuronide-conjugation in the liver, but it is rapidly metabolized and excreted in humans in comparison to rodents, explained RISS.

After examining exposure rates and amounts of BPA believed to be excreted in urine – both for adults and children aged 1 to 6 years – the body said the Margin of Exposure "*became 730 to 770 in 1 to 6 year-olds, and 40,000 to 81,000 in adults*".

*"These values were much larger than the MOE (25) estimated to cause health hazards in humans mentioned above or the conventional and conservative MOE (100), and thus the risk of BPA with regard to human health was believed to be very small,"* said the RISS research.

### **Global consensus strengthened**

US trade body North American Metal Packaging Alliance said the RISS conclusions *"further strengthens the global consensus of food safety agencies and toxicologists that BPA is safe as currently used in food and beverage packaging."*

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## Researchers study micropollutants in wastewater

By Christopher Dunagan

Posted August 24, 2011

PORT ORCHARD — University of Washington researchers are learning to form specialized armies of bacteria that can seek and destroy micropollutants lurking in sewage effluent.

Heidi Gough of the UW's Department of Civil and Environmental Engineering described the process Wednesday in Port Orchard, where experts gathered for a daylong conference about the future of reclaimed wastewater.

Micropollutants — which include medicines, pesticides and personal-care products — wash down the drain and get into sewers in extremely low concentrations. Some micropollutants, such as human estrogen from birth-control pills, have been implicated in reproductive problems among freshwater fish and amphibians in other parts of the country.

As sewage-treatment plants in Kitsap County prepare to use highly treated effluent for watering parks and ball fields, questions are surfacing about the effects of every possible contaminant — even when no environmental risks are expected.

Most micropollutants are destroyed during the sewage-treatment process, along with bacteria and viruses. Some bind to solids, which are separated and eventually trucked away. But some compounds survive in concentrations of parts per billion or parts per trillion, and researchers across the country are trying to measure the risks.

"So far, it is in the aquatic environment that we have seen the impacts," Gough said. "It is not an environmental crisis yet, but all the water eventually gets recycled."

It is happening now, she said, in major river systems. One community discharges treated wastewater upstream of another community, which withdraws the same water for drinking and other uses. Then that community discharges the water upstream of the next community. Theoretically, even micropollutants can build up over time.

Fortunately, she said, something else is happening to the water, because concentrations don't increase very much.

"I want to know what is happening," she said, "because, as an engineer, I want to do it better."

It has taken four years of study, but Gough and her associates have isolated groups of bacteria, each one specialized to break down one of several micropollutants chosen for her study. The bacteria were in the effluent all along, but the researchers found ways to grow the strains of bacteria, most of which belonged to a group called Sphingomonas.

Once the technique is perfected, a treatment plant would be able to respond to any micropollutant that becomes a concern, she said. Treatment plant operators could grow the specialized bacteria in a tank. The Sphingomonas, for example, seem to thrive on whey, a byproduct of cheese production, but they don't like sugars.

Studies show that a little of the bacteria added at the right time in the treatment process can eliminate bisphenol A, a plastic additive, in about 20 minutes. BPA, as it is called, has been linked to cancer in mice with possible implications for humans.

Mariko Lust, a UW graduate student involved in the project, has examined the fate of various estrogen compounds in sewage effluent. She said many types of estrogen are largely removed during normal treatment in a membrane bioreactor system, such as West Sound Utility District's treatment plant in Port Orchard. But some, including synthetic estrogen, pass through in reduced concentrations.

Lust said she was excited about the prospect of looking for bacteria that can remove estrogen from sewage.

Meanwhile, others at Wednesday's conference talked about the need to expand the use of reclaimed water, as communities are doing in California and Texas, as well as other places in the world. The prospect of drinking sewage effluent, once considered unlikely, is coming to pass in drought-stricken areas.

While water covers 68 percent of the Earth, only 3 percent is freshwater and 2 percent of that is ice, said Paul Schuler of General Electric World Vision. That leaves 1 percent for humans to share with fish and wildlife, and many areas of the world are running out of water.

"The amount of water that is safe to use is actually declining," said Schuler, whose company manufactures advanced sewage treatment plants. "We need to take care of our precious water resources."

The conference, at Kitsap County Administration Building, was organized by West Sound Utility District with support from the city of Port Orchard, Kitsap County Public Works, Kitsap Public Utility District and Silverdale Water District.

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## A BPA-free county?

*It's tough to get away from the chemical, but officials might try a selective ban*

**BY STEVE LAW**

*The Portland Tribune, Aug 25, 2011*

**Multnomah County Chair Jeff Cogen wants to enact a countywide ban on selling baby bottles and some other plastic products made with bisphenol A, after industry lobbyists killed a proposed statewide ban in this year's legislative session.**

Bisphenol A – BPA – is a chemical compound found in water bottles, canned food, cash register receipts, computer keyboards and a host of other products. It affects the body much like estrogen, and has been linked to prostate cancer and a variety of other health problems.

“There’s no dispute that BPA is a toxic, poisonous chemical,” Cogen says. “It’s increasingly clear that it shouldn’t be in products that people put in their mouths or in their bodies.”



CHRISTOPHER ONSTOTT / TRIBUNE PHOTO

Renee Hackenmiller-Paradis, environmental health program director for the Oregon Environmental Council, spots some sippy cups at a Southeast Portland Dollar Tree store that she suspects contain bisphenol A or BPA, which many studies indicate is a health hazard. A Dollar Tree official was skeptical the cups contain BPA but says those cups were made in

Many large retail chains refuse to sell baby bottles, sippy cups and reusable water bottles made with BPA. But that didn’t stop business lobbyists from pressing House Republicans early this year to sideline a Senate-passed bill that would have banned those products in Oregon.

So Cogen, in conjunction with his old boss, Portland City Commissioner Dan Saltzman, decided to push a similar local ban.

“Multnomah County government is the local health authority; it’s our job to protect the public health,” Cogen says.

He appointed a county work group to research various options and report to him in a couple of weeks. It’s not clear if Cogen will seek to go beyond the products listed in the Senate bill, or when he’ll issue a proposal. However, he says, “What the state tried to do makes a lot of sense to me.”

Whatever the county does must be done on the cheap, because of budget constraints and the lack of staff to monitor what retailers are selling.

“A lot of the unknowns are around cost,” says Emerald Bogue, Cogen’s policy adviser leading the effort.

Oregon Environmental Council, which has led the state campaign for BPA restrictions, supports the county move, says Renee Hackenmiller-Paradis, the Portland group’s environmental health program manager.

Though she estimates only 5 percent to 10 percent of baby bottles and sippy cups sold here contain BPA, she says a county ban means concerned parents wouldn’t have to play “detective” to know which products are safe for their babies and infants.

Senate Bill 695, which passed the Senate 20-9, would have banned the sale and manufacture of BPA in reusable water bottles and children’s beverage containers, plus infant formula sold to low-income families using the Women, Infants and Children subsidy program. That covers about half the baby formula sold in the state, Hackenmiller-Paradis says.

The bill also would have created a state advisory group to recommend a system for certifying and labeling products made without BPA, such as canned foods and drinks. Without a reliable labeling system, it's impossible for a shopper to know if a product contains BPA. Supporters say that could give consumers assurance that a "BPA-free" claim is accurate, and provide a marketing advantage for innovative Oregon companies, much as the Oregon Tilth certification system did for organic foods.

But the American Chemistry Council and other business lobbies vigorously opposed the bill. Even though the bill had enough votes to pass the House, Republican leaders wouldn't allow a floor vote, Hackenmiller-Paradis says. House Co-Speaker Bruce Hanna, R-Roseburg, who owns a soft-drink bottling company, didn't respond to interview requests.

### **Let FDA handle it?**

Some business groups contend that scientific studies don't convincingly show BPA is a human health hazard, and they fear restrictions on baby bottles might lead to efforts to restrict its use in canned foods and other applications.

It's better to let the federal Food and Drug Administration study the matter and regulate it in the food supply, says Craig Smith, vice president of the Portland-based Northwest Food Processors Association.

"County-by-county regulations on these kinds of issues don't work very well; in fact they don't work at all," Smith says. Multnomah County has no capacity to conduct risk assessments for products, he says.

Eight states have enacted bans on BPA in sippy cups and baby bottles and some, including Washington, include water bottles, says Sarah Doll, a Portland resident leading a national campaign against BPA for the State Alliance for Federal Reform of Chemical Policies.

Smith says those state laws were "politically driven, not science driven."

BPA, used in the lining of canned foods, helps prevent bacterial intrusions, such as salmonella. "BPA has been a major contributor to the safety of the food supply," Smith says, a point that BPA critics don't dispute.

However, there's a growing body of scientific studies documenting health problems from BPA. No one expects the international campaign against BPA to end with baby products and water bottles.

More than a billion pounds of BPA are produced each year in the United States, according to the National Library of Medicine website.

When a prominent local government such as Multnomah County enacts BPA restrictions, it can help change attitudes and lend momentum to wider efforts, says Bobbi Chase Wilding, organizing director of Clean New York, a nonprofit focused on environmental health issues.

Suffolk County in New York, which suffers from a high rate of breast cancer, led the nation in enacting BPA restrictions in 2009. Suffolk County, on Long Island, has 1.1 million people, and its local ban was a "tipping point," Chase Wilding says. Albany and Schenectady counties followed suit, and that led the way to statewide legislation in New York to ban BPA in baby bottles and sippy cups in 2010.

A county can provide an easier avenue to take on entrenched corporate interests, Chase Wilding says. "Machines of lobbying are not as powerful at the county level. The power levers are different and the economic levers are different."

Though Multnomah County isn't well-positioned to monitor retail sales, she says citizens will surely point out when the county rules are being violated.

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