Several months ago, I noted a controversy about the chemical bisphenol-A and its former ubiquity in water bottles. Up until very recently, despite reports by the Environmental Working Group and others that suggested significant health risks from BPA, our federal government showed no inclination to regulate the use of the chemical in consumer products.

The FDA has taken a step toward changing its mind now. A new agency report, widely covered in national media, states that

> Bisphenol A (BPA) is an industrial chemical that has been present in many hard plastic bottles and metal-based food and beverage cans since the 1960s.
>
> Studies employing standardized toxicity tests have thus far supported the safety of current low levels of human exposure to BPA. However, on the basis of results from recent studies using novel approaches to test for subtle effects, both the National Toxicology Program at the National Institutes of Health and FDA have some concern about the potential effects of BPA on the brain, behavior, and prostate gland in fetuses, infants, and young children. In cooperation with the National Toxicology Program, FDA's National Center for Toxicological Research is carrying out in-depth studies to answer key questions and clarify uncertainties about the risks of BPA.
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> In the interim:
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> FDA is taking reasonable steps to reduce human exposure to BPA in the food supply. These steps include:
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> supporting the industry's actions to stop producing BPA-containing baby bottles and infant feeding cups for the U.S. market;
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> facilitating the development of alternatives to BPA for the linings of infant formula cans; and
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> supporting efforts to replace BPA or minimize BPA levels in other food can linings.
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> FDA is supporting a shift to a more robust regulatory framework for oversight of BPA.
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> FDA is seeking further public comment and external input on the science

> surrounding BPA.
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> FDA is also supporting recommendations from the Department of Health and Human Services for infant feeding and food preparation to reduce exposure to BPA.

Following that report, Wisconsin and Washington have embarked rapidly on the road to banning BPA in baby bottles and in food and drink containers, following Minnesota and Connecticut, which banned the substance last year. My initial thought was that the bad publicity surrounding Sigg, Nalgene, and others that used BPA in the past would already be chasing the chemical out of the consumer food container market. But apparently not: according to Plastics News, "[m]ore than 6 billion pounds of BPA were manufactured in the U.S. in 2009." My wild guess is that the products still manufactured with BPA are aimed at a somewhat less upscale market than bottles such as Sigg and Nalgene.

And in other happy plastics news – unsurprising to anyone who has been following the health issues surrounding plastics in consumer products – as reported in the Los Angeles Times:

> Flame-retardant chemicals found in many household consumer products may reduce fertility in women, researchers reported Tuesday. Their study joins several other papers published in the last two years suggesting that the chemicals, polybrominated diphenyl ethers, or PBDEs, affect human health.

According to the Times, UC Berkeley researchers studied a group of women exposed to the chemical and found that "each tenfold increase in blood concentration of PBDEs was linked to a 30% decrease in the likelihood of becoming pregnant each month."

Unfortunately, emerging chemical risks are everywhere, especially in consumer products. (And as this post by Tim about new research on risks from titanium dioxide nanoparticles demonstrates, it's not just plastics.) It increasingly appears that as our knowledge about the nature and magnitude of these risks increases, we often find more risk than previously believed. Our regulatory systems lag behind the emerging science, and in the end, all we know is that we truly don't know very much about the new risks we're imposing on ourselves.