Biomonitoring: One Reporter's Perspective

Pat Rizzuto
BNA's Chemical Regulation Reporter

(703) 341-3741



Chemical Companies
Have a Real Challenge



Bad Blood Blues By Howlin' Harv and Met'l Plate Mel

People let me tell you we got trouble, Oh, Lord, trouble...

Well I saw it in a journal, called EHP,
In an article from the CDC.
Said we got bad blood, Oh Lord, bad blood.

Saw it in a journal, so it gots to be true, Said our blood is just a chemical stew. Oh, we got bad blood, Oh Lord, bad blood.

Our blood's got pyrethroids, and carbamates, Gonna make us shiver, gonna make us shake.



Our blood's got pyrethroids, and carbamates, Gonna make us shiver, gonna make us shake. Well we got bad blood, Oh Lord, we got bad blood.

Our blood's got dioxins and PCBs, Prob'ly give us cancer, sure as you please. Oh, we got bad blood, Oh Lord, bad blood.

Our bloods got phthalates, endocrine disruptors, Just thinkin' 'bout it, got me all flustered. Oh, we got bad blood, Oh Lord, bad blood.

Bad blood, bad blood, what ya gonna do?
Got all them chemicals circulate'n in you.
Bad blood, bad blood, when we die,
Goin' to that hazardous waste site in the sky.

Well we got bad blood, Oh Lord, bad blood.

http://www.beladonabluesband.com

Consisting of: 'Howlini' Harrry Clewell, 'Met'l Plate' Mel Andersen, and 'Jiving' Jerry Campbell.



Finding out there are unpronounceable chemicals in their bodies makes people feel they've been invaded.

Moms in particular worry about breastfeeding their babies.

Saying, "there's so little you have nothing to worry about" does not work when you are talking about such sacred food.



The fact that the chemical names are unpronounceable really doesn't help.

English doesn't have combinations like phth..., so they're being invaded by something foreign, strange.

Plus, since they can't pronounce what's in their bodies, people feel dumb, and so they are twice annoyed.



Biomonitoring is all about numbers, and let's face it most Americans and 98% of journalists I know are number impaired.

Placing biomonitoring in context takes time, and in our Crackberry world people reach their opinions in a blink and move on.



Shamelessly stealing from something Justin Powell from Keller and Heckman said at a meeting last week.

People trust homeopathic remedies.

Those are "medicines" made from substances diluted thousands of times in water or alcohol. The end result can be a solution more dilute than a single molecule of salt placed in an ocean.

If people, like my sister, think this cures them, how are you going to craft a message that says small doses aren't a problem (that is assuming it's not and there's a data gap there sometimes)?



NGO's are clever.

They are conducting biomonitoring studies that are journalists must write about such as the World Wildlife Fund's Survey of Chemicals in the blood of European Environmental Ministers.

www.wwf.fi/wwf/www/uploads/pdf/badblood.pdf



BNA Environment, Health & Safety

At meetings I attend, I hear recommendations to put the numbers in context. But I haven't seen many good examples. At a recent meeting, someone prepared a comparison of natural and manmade chemicals, e.g.

Acetone Tetrodotoxin (toxin in fugu fish) LD50 (rats) 8,430 mg/Kg LD50 (mice) 0.01 mg/Kg

This does not work!

Do you really want to compare your chemicals to known poisons?

Death is not an acceptable outcome; why would any one give information about the lethal dose?



Context that might be helpful would be to compare the range detected in human bodies with a No Observed Adverse Effect Level or with the internal dose at the NOAEL.

Someone gave the National Geographic good context in its Pollution Within article. They said that one part per billion would be like putting a half-teaspoon (two milliliters) of red dye into an Olympic-size swimming pool. That's nice; I don't hear images like that very often.



Chemical companies and federal agencies are stretched so thin between increasing demands and less budgets for agencies and demands of acronyms like HPV, REACH, GHS, etc. for companies (and some agencies too), that strategies to communicate biomonitoring information has not gotten the attention it deserves. But biomonitoring is something that needs conferences like this—and follow-up work—to pay attention to, because more such studies could easily lead to more acronyms affecting how you do business.

Now let's turn the tables, and let you all answer questions.

