

## **CONGRESS BLOG**

THE HILL'S FORUM FOR LAWMAKERS AND POLICY PROFESSIONALS

## It's time to clean up our largest source of lead emissions – small planes

By Dr. Nathan Donley April 27, 2016

As residents of Flint, Mich. and other cities grapple with high levels of lead in their drinking water, another source of lead exposure is, quite literally, flying under the radar – the ongoing use of leaded gasoline in small airplanes that are spewing dangerous levels of lead all across the country.

Widely believed to be banned already, leaded gasoline is still used in the majority of small propeller-driven airplanes, which is no small thing: It accounts for more than half of the nearly 1,000 tons of lead emissions in the United States each year.

Now, all the EPA-bashing members of Congress claiming to be horrified by the government's complicity in Flint can significantly reduce our nation's lead pollution by supporting a bill recently introduced into the U.S. House of Representatives that will close the loophole allowing small planes to use leaded gas.

The "No Lead in the Air Act of 2016," introduced by U.S. Rep. Eleanor Holmes Norton (D-D.C.), takes aim at a very real, very solvable health problem -- the nation's largest remaining source of lead emissions.

With the EPA and the Centers for Disease Control making clear there is no safe level of lead in young children, this issue deserves serious consideration, both by Congress and the EPA.

The stakes are extremely high, especially if you live, work or go to school near one of the nation's airports: The EPA estimates that 16 million people live and 3 million children go to school within 1 kilometer – about two-thirds of a mile -- of airports where the greatest amounts of lead are released.

As far back as 2010, the EPA acknowledged that children can be exposed to lead emitted into the air either "directly by inhalation, or indirectly by ingestion of lead-contaminated food, water or other materials including dust and soil."

These risks were documented in a Duke University study that detected higher levels of lead in North Carolina children living within half a mile of airports where planes use leaded gas. The researchers concluded there was a significant association between leaded aviation fuel exposure and higher blood lead levels in children.

Like many of the families exposed to leadtainted tap water in Flint, the families across the country subjected to these lead emissions from airplane fuel are more likely to be lowincome and minority -- just the latest example of vulnerable and minority populations being disproportionately exposed to harmful pollutants.

While nearly half of lead emissions from planes remain near airports, the rest is dispersed throughout the environment during flight. This is significant because lead doesn't break down. Once it is taken out of the ground, it simply exists in the environment until it can be buried again.

Released in the environment, lead is an extremely toxic heavy metal that can cause severe nervous system damage, reduced intelligence, behavioral changes and developmental defects that are often irreversible.

Not surprisingly, like the difficulties that were faced removing lead from pipes, paints and auto fuel, the beneficial properties of lead make it difficult to incentivize replacement. And it's true, just like the lead that's been banned from other products, the lead in airplane fuel has benefits -- it boosts octane and prevents "knocking" which could cause the engine to fail mid flight.

But just as with other products where lead was banned, the risks associated with its ongoing use are far too high. And, just as with the other products, there are alternatives to using lead in aviation fuels. It's estimated that about 80 percent of the small plane fleet could safely switch to unleaded gasoline immediately, with no retrofitting needed, as long as it does not contain ethanol. But there is currently no economic incentive for airports to carry multiple fuels. And without regulatory pressure, that won't change.

The "No Lead in the Air Act of 2016" can provide the push needed to trigger the long-overdue elimination of these dangerous fuels. The bill wouldn't ban the toxic fuel until 2021, allowing time for an alternative to be tested and put in place for the remaining 20 percent of planes.

Whatever the cost, politically and financially, we cannot simply look away and continue to allow lead to literally be dumped on millions of children who have no choice other than to breathe toxic air while playing outside or learning their ABCs.