

**My Voice: Consider gasoline's health hazards**

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**The effects of gasoline exhaust before birth.**



Orrie Swayze (Photo: Submitted photo)

While fueling with gasoline think: "Gasoline is cigarette smoke."

You might think, "I don't see any health problems caused by auto emissions in my community." But you do see those problems in your community, reports UCLA medical research: "The time between conception and birth is the life stage most vulnerable to environmental exposures to gasoline's benzene and other known human carcinogenic tailpipe emissions: We observe at our area hospitals and nationally that even with only diluted short term exposures to automobile's benzene (also a neurotoxin) and other emissions similar to cigarette smoke. ... We see more than the expected normal cases of birth defects, preterm births, childhood heart disease, cancers, asthma, brain damage, learning disabilities and behavioral problems. And these outcomes are not rare, translating to relatively large numbers for a community especially for our most vulnerable or our smallest children," explains Dr. Beate Ritz, M.D. Her UCLA team's ground-breaking research specifically about your auto's air pollution impacts on women, infants and children still is applauded nationally.

Also, these "impacts" or "outcomes" often are described as "killing them softly," by many, including research done by the Clean Fuels Development Coalition.

The advent of fracking's added crude oil production has created a very persuasive, successful television ad campaign. Predictably, the focus of the ads are, "The color of America's energy future is red, white and blue," skillfully implying our energy future is petroleum. This ad campaign and petroleum's other self-serving propaganda also have been able to successfully elevate gasoline's image to red, white and blue, or America's fuel: Even here in South Dakota.

Ironically, petroleum interests brag about gasoline as America's fuel, even when gasoline's primary toxic tailpipe emissions are benzene, plus other known human carcinogens and DNA mutagens identical to those found in cigarette smoke. Tailpipe emissions that daily poison especially our smallest children "killing them softly."

The 1990 clean air act banned use of lead as a gasoline octane enhancer. To avoid creating even greater health risks, the clean air act also required EPA to substantially reduce comparably poisonous benzene-related octane called BTX, or benzene, toluene, xylene. It was known even then this very difficult to fully combust benzene-related octane (that 30 percent ethanol from natural gas, biomass corn, etc. can replace) often produces benzene and other known human carcinogens in the engine and the catalytic converter. These emissions then often escape the catalytic converter at start, idle and acceleration or typical traffic driving conditions.

Instead, the EPA aligned with petroleum interests and only reduced gasoline benzene content from 1 percent to a half percent. It then used this meager half-percent reduction in gasoline benzene content as an excuse to allow gasoline's BTX content to increase to almost 30 percent. Contrary to the Clean Air Act directives, this trade-off created a substantial net increase of benzene emissions.

Unlike benzene-related BTX, octane ethanol does not contain or produce benzene or other known human carcinogenic emissions. Yet today, the EPA deceptively claims it is illegal for standard auto owners to protect their children by reducing their own autos' benzene and other known human carcinogenic emissions up to 80 percent — simply by fueling with E30.

Importantly, 93 octane E30 can reduce our medical costs tens of billions of dollars annually when replacing these benzene-based octanes that are “killing our children softly.” E30 also is endorsed by auto manufacturers and the Department of Energy as a “super premium” fuel. Most importantly, for over five years, many thousands of standard auto owners across the nation have been able to daily access E85 blender pump's E30.

They repeatedly have selected lower cost, better performance “premium” E30 to successfully demonstrate that almost our entire auto fleet is compatible with and can take advantage of E30's premium performance. They have daily traveled several millions of miles, often reporting “more power” and “can't tell any mileage difference.”

As we quickly transition away from benzene-related octane to ethanol's octane from all sources such as natural gas, biomass, corn ethanol, etc. The biggest winners will be our/your children. Visit a children's hospital: It will help remind you to think “cigarette smoke” when fueling your auto.

**Orrie Swayze** of Wilmot is a graduate of South Dakota State University who majored in general chemistry. He served as an FVC pilot in the Vietnam War before returning to farming. He is also a founding board member of the S.D. Corn Growers Association, serving as president. My Voice columns should be 500 to 700 words. Submissions should include a portrait-type photograph of the author. Authors also should include their full name, age, occupation and relevant organizational memberships. Send columns to Argus Leader, Box 5034, Sioux Falls, SD 57117-5034, fax them to 605-331-2294 or email them to [letters@argusleader.com](mailto:letters@argusleader.com).