

# Formaldehyde: A Poison and Carcinogen Used in Vaccines

By: Kate Raines

Warning of the dangers of formaldehyde in the workplace, the government's own Occupational Safety and Health Administration (OSHA) says, "health hazards of formaldehyde are primarily due to its toxic effects after inhalation, after direct contact with the skin or eyes by formaldehyde in liquid or vapor form, and after ingestion" adding that "Ingestion of as little as 30 ml of a 37% solution of formaldehyde (formalin) can result in death" and "Diverse damage to other organ systems including the liver, kidney, spleen, pancreas, brain, and central nervous systems can occur from the acute response to ingestion of formaldehyde."

Yet, they don't even mention the effects of exposure by injection, as when formaldehyde is pumped into a newborn baby as part of the Hep B vaccine, currently given right after birth, or along with a host of other vaccine ingredients injected over the next few months of the infant's life (see CDC Vaccine Expedient List to see how frequently formaldehyde shows up as a vaccine ingredient).

## Rationale for Using Formaldehyde in Vaccines

Most people first become familiar with noxious-smelling formalin, the liquid form of formaldehyde, in high school biology labs. It only takes a whiff to know the stuff is poison. But scientific and hospital laboratories are not by any means the only, or even the most common, sources of formaldehyde exposure. For one thing, formaldehyde is a natural byproduct of decomposition, and as such is found in very small amounts in most living organisms, from plants to animals, and including humans. In the limited quantities involved in natural exposure, as occurs

when formaldehyde is produced, inhaled or ingested in tiny amounts, the chemical is rapidly broken down by specialized enzymes in the body and is either breathed out as CO2 or excreted in urine.

It is this natural ability of the body to neutralize naturally occurring formaldehyde that is proposed as justification for using formaldehyde as a vaccine ingredient, although few data actually address the pharmacologic differences between ingesting or inhaling the chemical and injecting it, effectively bypassing the body's usual method of breaking down the toxin. One might assume that, since formaldehyde is routinely used in many vaccines given to babies, even tiny and vulnerable premature infants, studies would have looked at whether it is safe to inject this poison directly into their immature systems. No such studies appear to have been done.

#### Increased Exposure in the Industrialized World

Residual levels of free formaldehyde (up to 0.02% is permitted by the U.S. Food and Drug Administration (FDA), used as a stabilizer or an inactivating ingredient, are found in vaccines against anthrax, diphtheria, hepatitis

A, influenza, Japanese encephalitis, and tetanus. In addition to exposure via vaccines, today's children (and adults) are exposed to much higher levels of the compound in general than were previously encountered. Formaldehyde is commonly found in many products and processes of industrialized society, where unsafe levels of the toxic gas may be inhaled, as with exposure to first- or second-hand cigarette smoke or to outgassing from preserved wood products or carpeting, applied unknowingly along with cosmetics or hair products.

In any of its many guises (in addition to formalin, formaldehyde also may be listed as formic aldehyde, methanediol, methanal, methyl aldehyde, methylene glycol or methylene oxide), not to mention other preservative chemicals known to release the gas as a byproduct, formaldehyde exposure is unavoidable in today's world. It is encountered in cigarette smoke, gas stoves, and fireplaces; as a preservative in some foods; in household products including dish detergents and fabric softeners; medicines, cosmetics and hair products; glues and other adhesives; paper, plastics and wood products. It is also used in the manufacturing process for a myriad of products including fertilizers, paper, plywood, latex, leather, rubber, photographic film and processing, and sugar.

## Formaldehyde Is a Recognized Carcinogen and Health Threat

As represented by the National Institute of Environmental Health Sciences (NIEHS), a number of watchdog agencies including the American Cancer Society, the FDA, the National Cancer Institute (NCI), and others have classified formaldehyde as a known or probable cancer-causing agent, or carcinogen, and OSHA adds that it is not only a "complete carcinogen" but also "a sensitizing agent that can cause an immune system response upon initial exposure." It is known to be highly irritating to the eyes and respiratory tissues and skin, particularly with repeated exposure.

Because of its classification as a toxin and carcinogen, strict guidelines are in place to define acceptable levels of formaldehyde, particularly for people considered to be at higher risk due to their environment (those living in FEMA emergency housing trailers or RVs, for example, or those with new

carpeting), or to their professions (embalmers, hair stylists using certain products and medical lab technicians among others). For workers at risk of exposure to high levels of formaldehyde vapors, OSHA recommends annual training to alert workers to the dangers of exposure above recommended concentrations (formaldehyde levels above 0.1 parts per million, or ppm, can cause respiratory irritation and levels above 0.5 ppm constitute an "action level" warranting "initiation of worker medical surveillance"). For the general population, the dangers of formaldehyde exposure have not raised significant concerns among regulatory circles, though there is no shortage of expert advice on minimizing exposure to the poison. The NCI recommends using exterior-grade

pressed wood products (such as plywood, paneling, and particle board), ensuring adequate ventilation with use of formaldehyde-emitting products, and minimizing humidity in the home.

California's Air Resources Board adds that it is important to avoid cigarette smoke in enclosed spaces as well as fully ventilating spaces while using cosmetics that may include formaldehyde, such as nail polish and polish hardeners, when painting or putting up wallpaper, and during use of any type of gas-heating source (gas, kerosene or propane stoves as well as woodburning stoves). That resource also recommends washing permanent press clothing to minimize formaldehyde inhalation.

#### Little Is Known About Injected Formaldehyde

In the majority of studies, human data on the toxic effects of formaldehyde refer to the compound inhaled as a gas, and it is generally reported to be essentially harmless and easily metabolized, with most governing bodies agreeing that the small amounts inhaled, ingested, or injected in vaccines

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are safe for even the smallest of infants. A model-based study, "assuming metabolism at the site of injection only," reported that "formaldehyde is essentially completely removed from the site of injection within 30 minutes," and used that modeling data to predict that infant systemic levels would reflect less than 1% of the usual environmental exposure level.

The Food and Drug Administration reports that, "There is no evidence linking cancer to infrequent exposure to tiny amounts of formal-dehyde via injection as occurs with vaccines." What they do not seem to consider is that infants are systematically given multiple doses of vaccines at one time, so it is the combined level of formaldehyde exposure that needs to be calculated, not the amount in a single vaccine dose. According to Dr. Sherri J. Tenpenny's Integrative Medical Center, by the time a child has reached 5 years of age, he or she has been injected with a total of 1,795 micrograms (mcg), or 1.795 milligrams of formaldehyde, as follows:

Hepatitis b – 3 doses x 15 mcg each DTaP – 5 doses x 100 mcg each Polio (IPV) – 5 doses x 200 mcg each Influenza – 6 doses x 25 mcg each Hepatitis A – 1 dose x 100 mcg each

#### Valid Questions Remain Unanswered

Little data address the differences in metabolism that may occur when formaldehyde is not inhaled but injected, as occurs with vaccines, or the differing levels that may or may not be tolerated by infants and children compared with adults. Even animal studies generally look only at inhaled or applied formaldehyde. One very old study, however, showed that even highly diluted formalin (formaldehyde in liquid) caused serious health issues in study animals, regardless of method of administration.

Although such a study can't take the place of evaluation in humans (or more up-to-date laboratory evaluation), the author of that study reported that intraperitoneal (injected into the body cavity) formalin had "a destructive action" on any organ it came in contact with, including the pancreas, liver, peritoneal fat, and fallopian tubes; injection into the lungs caused pneumonia and bronchitis; and injection into muscle or under the skin (both of which are routes commonly used for administration of vaccines) caused significant inflammation. The author concluded that "formalin in whatever way introduced into the body is absorbed, and is then capable of producing lesions" in the affected organs.

Just because the human body appears capable of processing and eliminating a certain minute level of formal-dehyde when it is encountered in the everyday modern environment, does not mean it is safe to repeatedly challenge the immature immune system of an infant or child with such a toxic substance.

Read the full article with references at http://vaccineimpact.com/2015/formaldehyde-a-poison-and-carcinogen-used-in-vaccines/

To find out how to legally and/or lawfully avoid unwanted injections of all kinds, go to http://www.vaclib.org/exemption.htm



### **Putin Again Warns U.S.**

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are actually directed at neutralizing the strategic nuclear potential of other nuclear states, apart from the United States and their allies; primarily that of Russia, of course, and at obtaining a decisive military supremacy with all the ensuing consequences."

The fact that Putin did not elaborate on "the ensuing consequences" in no way watered down his direct message: Obama, like Bush and Cheney before him, is driving the world rapidly towards thermonuclear confrontation. Putin made clear that Russia is already preparing for such a confrontation by the very work that was the subject of the special annual session he was addressing.

#### **Putin explained:**



"We have said repeatedly that Russia will take the necessary reciprocal measures to strengthen its nuclear potential. We will also work on antimissile defense systems as well, but on the first stage, as we have repeatedly said, we will focus also on offensive systems capable of overcoming any anti-missile defense systems."

Putin noted, in concluding his opening remarks, that Russia has been working for the past three years on developing

"a number of promising armament systems capable of performing combat missions in conditions of an

anti-missile defense system in depth," noting the combat units have begun receiving such new weapons systems this year already.

Not everyone in the US and the West has missed the point. Stephen Blank, a senior fellow at the American Foreign Policy Council recently wrote an article titled, "The West Underestimates Putin at Its Peril." He began,

"To the great British military analyst Basil Liddell-Hart, it was axiomatic that the purpose of war was a better peace. In other words, for military operations to be successful, they must be correlated with political outcomes and strategic gains." After noting that the Obama administration has shown itself to be incapable of strategic thinking, Blank wrote, "Whatever defects Russia and its armed forces have, this disdain for strategy is not one of them. Washington's elites, with few exceptions, cannot accept that Russian President Vladimir Putin thinks and acts strategically." Blank then demonstrated that, in the current case of Syria, Putin has done precisely that. He concluded that "Putin may ultimately lose his game in Syria, because nothing is as unpredictable as

war. But that possibility cannot justify the complacency, arrogance, and intellectual laziness that threatens U.S. interests and allies."

Julian Borger writing in the Guardian Nov. 10, brought the issue directly back to US nuclear weapons provocations against Moscow. Borger reported on recent warnings by former US Joint Chief of Staff Vice Chairman Gen. James Cartwright, who stated that the modernization of the US tactical nuclear weapons in Europe, the B-61 12, makes that weapon "usable," and this poses a grave danger of a slide into thermonuclear

war. Cartwright told PBS "If I can drive down the yield, drive down, therefore the likelihood of fallout, etc., does that make it more usable in the eyes of some — some President or national security decision-making process? And the answer is, it likely could be more usable." Borger noted, "The great thing about nuclear weapons was that their use was supposed to be unthinkable, and they were therefore a deterrent to contemplation of a new world war. Once they become 'thinkable' we are in a different, and much more dangerous, universe."

